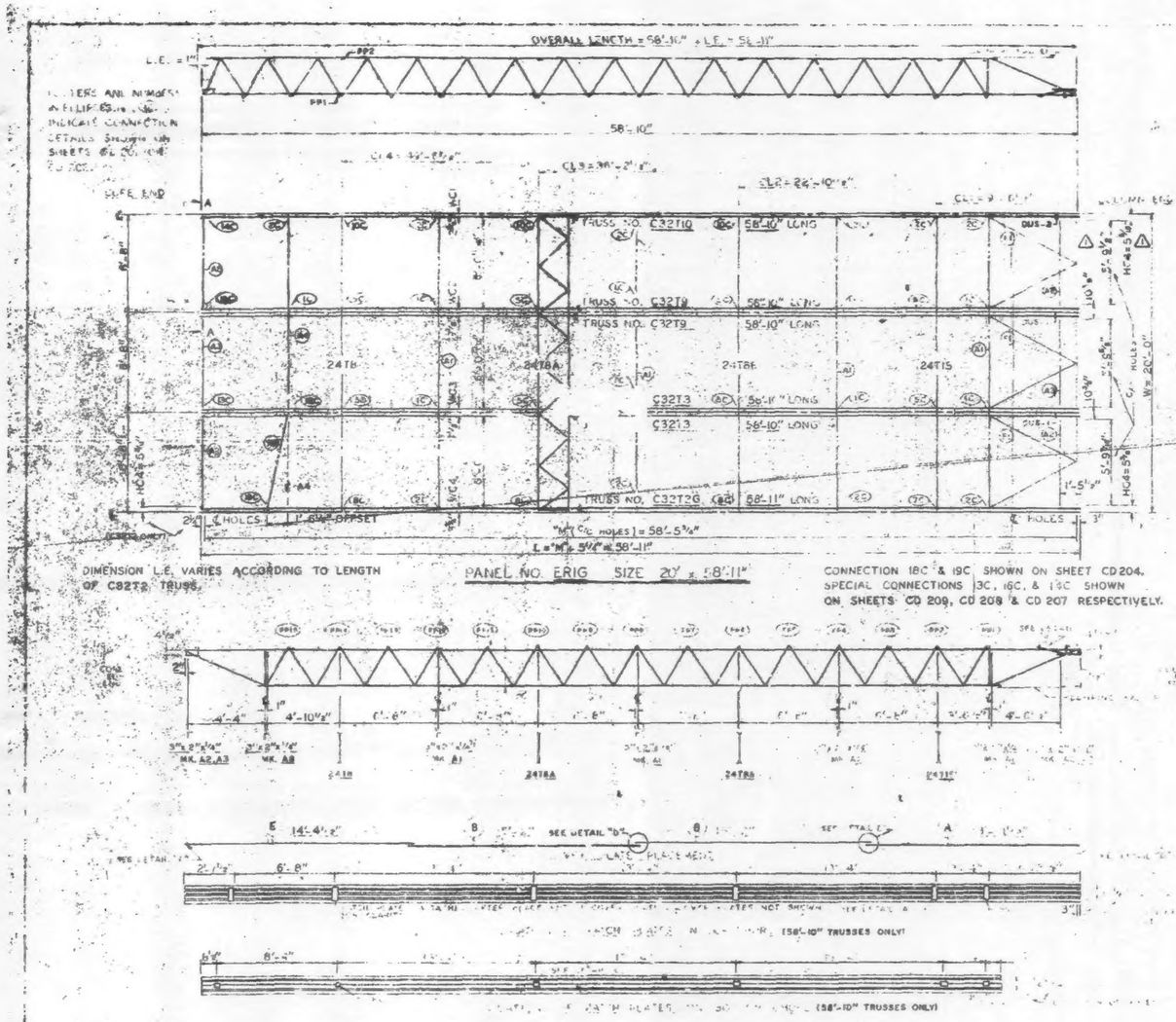
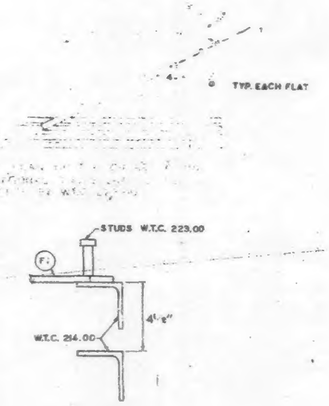
WTCI-131-LEEA



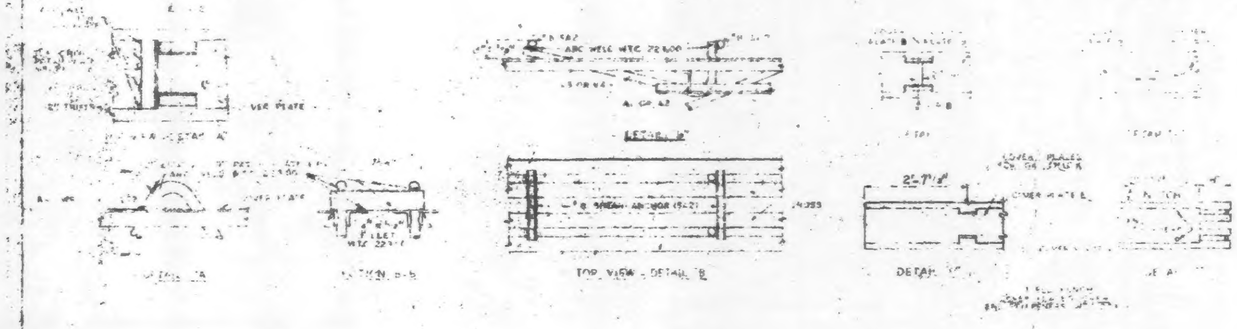


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

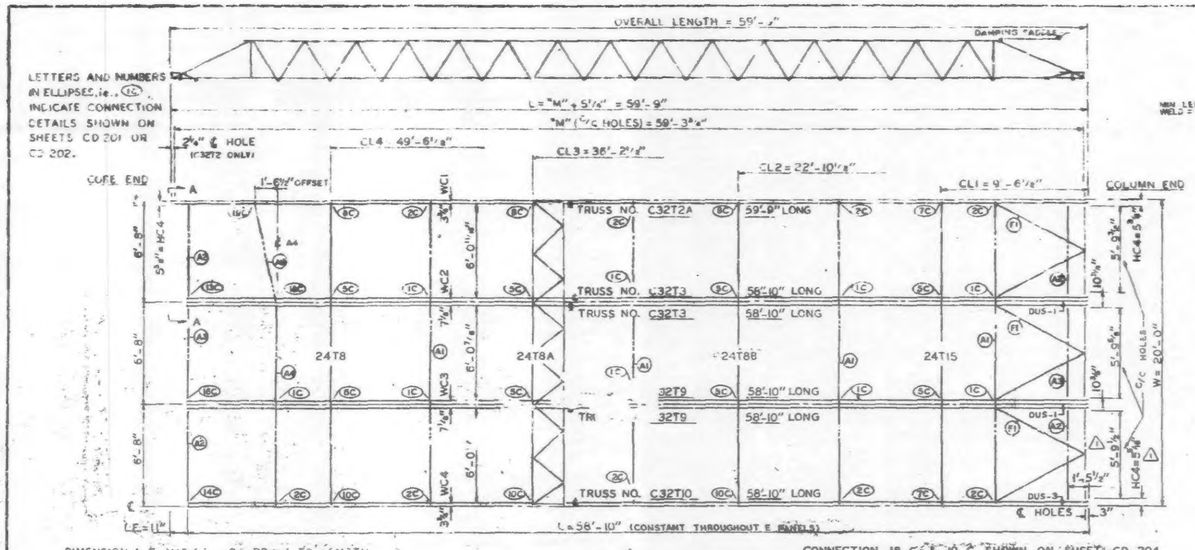
ANGLE CLIPS	C1	20		ST 400
	C2	4		ST 401
CONNECTION PAD				ST 228
				ST 228
CONNECTION PLATES	P1	5	3" x 8" x 0'-8"	ST 400
	P2	1	4" x .38" x 0'-8"	ST 400
	P3	1	4" x .38" x 1'-0"	ST 400
	P5	3	4" x .38" x 1'-0"	ST 400
	P6	1	4" x .38" x 0'-8"	ST 400
H.S. SHEAR ANCHOR	SA2	8	5/8" Ø STUD x 0'-4"	ST 400
PATCH PLATES	PP1	16	2" x 1'-4" x 0'-9"	ST 400
	PP2	16	3" x 1'-4" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
1	9-19-08	AS NOTED	T.N.C.



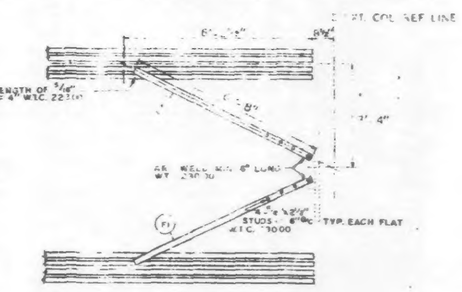
James White 9/25/08



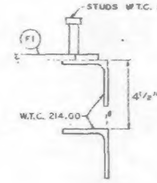
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1A SIZE 20' x 59'-9"

CONNECTION 18-C & 10-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

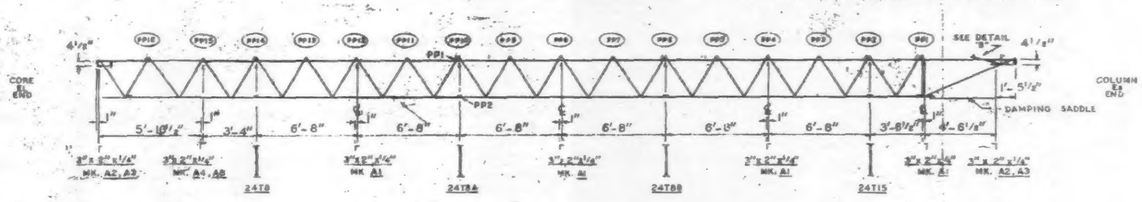


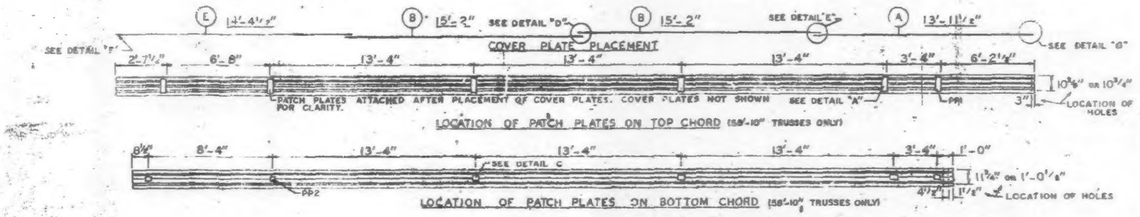
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

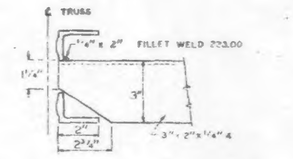
MK. NO.	QUANTITY		SIZE	LT. WT.
	MA	MC		
CHORDS	T2A	1	[illegible]	ST 50-A
	T3	2	[illegible]	ST 50-B
	T9	2	[illegible]	ST 50-B
	T10	1	[illegible]	ST 50-C
KICKING THRUSTS	T8	1	4TS 10'-11"	ST 50-B
	T8A	1	2 6TBA 10'-11"	ST 50-A
	T8B	1	2 6TBB 10'-11"	ST 50-B
	T15	1	2 6T15 10'-11"	ST 50-C
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	1	3" x 2" x 1/4" x 11'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-0 1/2"	ST 403
DIAGONAL FLATS	F1	6	1" x 7" x 1'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11"	ST 303
	B	6	8" x .0135" x 15'-2"	ST 303
	E	3	8" x .0135" x 10'-8 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 3" x 3" x 5/16" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-11 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-8 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 5/16" ϕ x 1'-3"	ST 400
	CB3	8	1 5/16" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 1/2" x 6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 5'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1 1/4" x 1'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
7/8 SHEAR ANCHOR	SA2	6	7/8 ϕ HEAR x 0'-10"	ST 410
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW WT. 40GEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





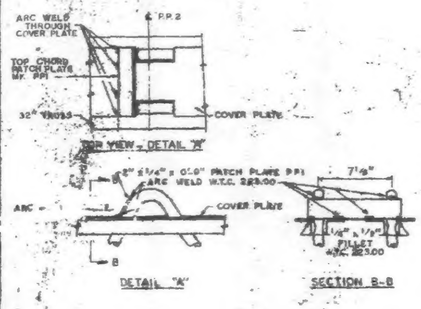


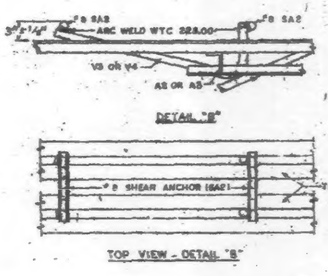
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

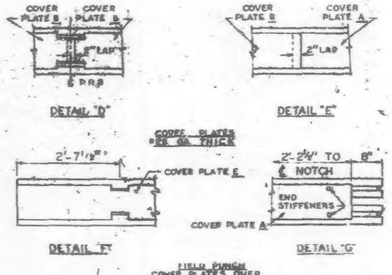
NO.	DATE	REVISION	BY
1	8-10-68	A3 NOTED	T.M.C.

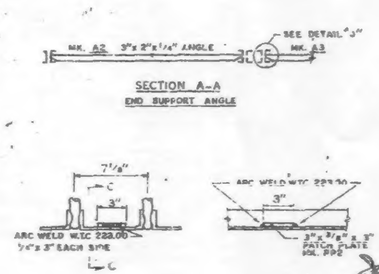
REF. DRWGS.

7-A82-9 & 10	4-15-68
7-A83-11	5-10-68
7-A84-2,3,5 & 39	1-3-68
7-A84-15 & 16	5-6-68
7-A84-42	4-1-68
SA-124	10-20-68
7-A81-3	4-19-68
7-A81-6,7 & 8	5-10-68









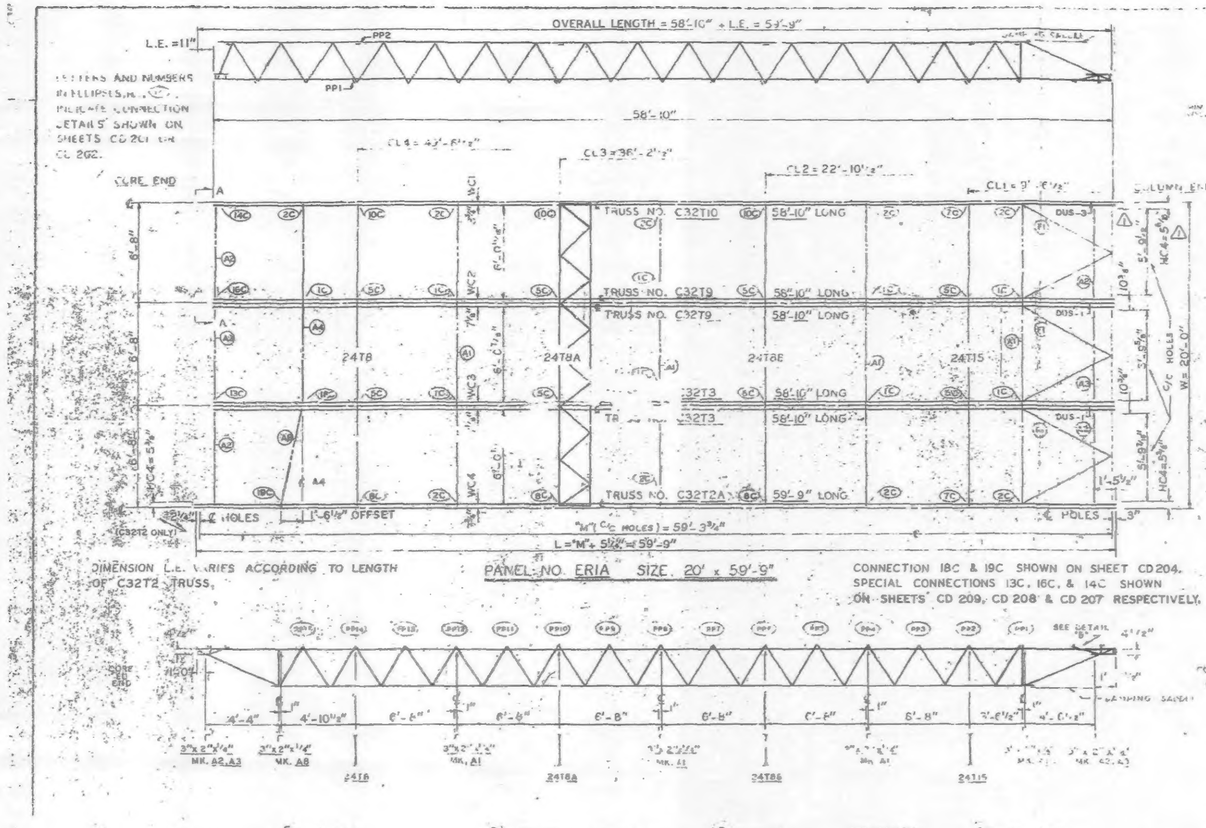
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

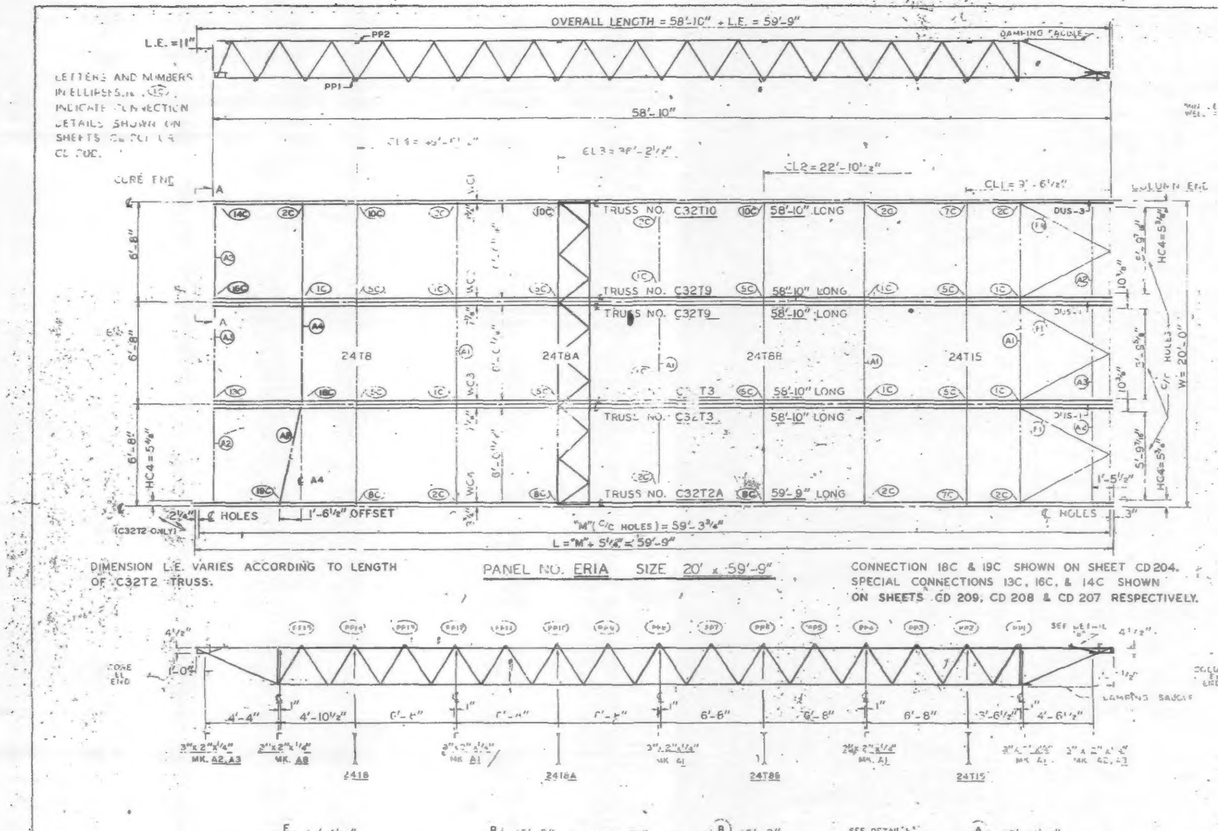
BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68,
69 (NORTH) PANEL E1A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-11 5-10-68	PLATE
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE 9/25/68	DRAWN BY [illegible] DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A CARL WEBER		FABRICATION CONT NO. W.T.C. 221	SHEET NO FP E1A

James White


OVERALL LENGTH = 58'-10" + L.E. = 59'-9"
L.E. = 11"
PP2
PP1
58'-10"
CL4 = 43'-8½"
CL3 = 36'-2½"
CL2 = 22'-10½"
CL1 = 9'-6½"
CORE END
COLUMN END
TRUSS NO. C32T10
TRUSS NO. C32T9
TRUSS NO. C32T9
TRUSS NO. C32T2A
58'-10" LONG
59'-9" LONG
24T8
24T8A
24T8E
24T15
DUS-3
DUS-1
DUS-1
WC2
WC3
WC4
6'-8"
6'-8"
6'-8"
6'-8"
5'-0"
5'-0"
5'-0

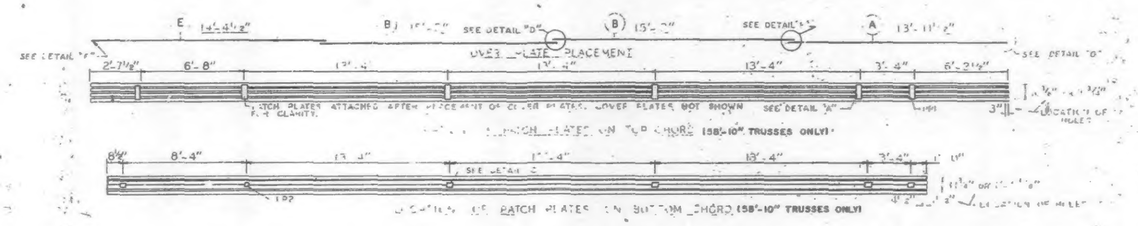


LETTERS AND NUMBERS IN ELLIPSES (A1, C1, ETC.) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 & CD 202.

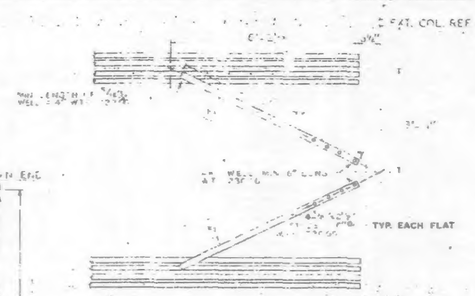
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIA SIZE 20' x 59'-9"

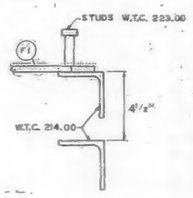
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)



TYPICAL PLAN OF TOP CHORD JOINT AND SKEWED END DIAGONAL TRUSS BRACES PLACED PER TRUCK BY WTC 223.00

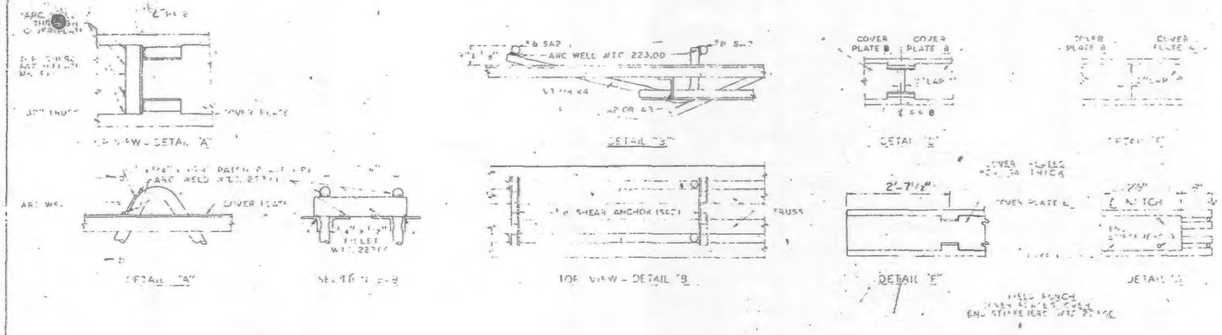


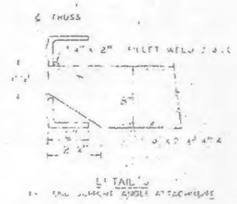
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MARK	QTY.	SIZE	DWG.
TOP CHORD SPLICE	T2A	3212A - 58'-3"	ST 202A
	T3	3213 - 58'-10"	ST 203
	T9	3219 - 58'-10"	ST 209
	T10	3210 - 58'-10"	ST 210
BOTTOM CHORD	TH	24H - 19'-11"	ST 208
	T8A	24T8A - 19'-11"	ST 208A
	T8B	24T8B - 19'-11"	ST 208B
	T15	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	3" x 2" x 1'-4" x 19'-11"	ST 403
	A2	3" x 2" x 4" x 5'-1 1/2"	ST 403
	A3	3" x 2" x 4" x 1'-1 1/2"	ST 403
	A4	3" x 2" x 1'-4" x 19'-3"	ST 403
	A8	3" x 2" x 4" x 6'-8 1/2"	ST 405
DIAGONAL FLATS	F1	1/2" x 5" x 6'-8"	ST 402
COVER PLATES	A	9" x .0135" x 13'-11 1/2"	ST 303
	B	9" x .0135" x 15'-2"	ST 303
	E	9" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	3" x 1 1/2" x 1'-8"	ST 400
	C2	2 1/2" x 1 1/2" x 1'-6"	ST 400
JAMMING SADDLE	[illegible]	3" x 1 1/2" x 3'-2"	ST 208
	[illegible]	3" x 5" x 1 1/2" x 3'-2"	ST 208
CONNECTION BAR	CB1	1" x 1'-3"	ST 400
	CB2	1" x 1'-3"	ST 400
	C6	1" x 1'-5"	ST 400
CONNECTION PLATES	P1	3" x 2" x 3/8" x 6'-2"	ST 401
	P2	4" x 2" x .390" x 0'-8"	ST 400
	P3	4" x 2" @ 30° x 1'-0"	ST 400
	P5	4" x 2" x 1'-4" x 1'-6"	ST 400
	P6	4" x 2" x .390" x 0'-9"	ST 401
7/8" SHEAR ANCHOR	SA2	7/8" HEADED x 0'-9"	ST 400
PATCH PLATES	PP1	2" x 1'-4" x 0'-9"	ST 400
	PP2	3" x 1'-4" x 0'-7"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.



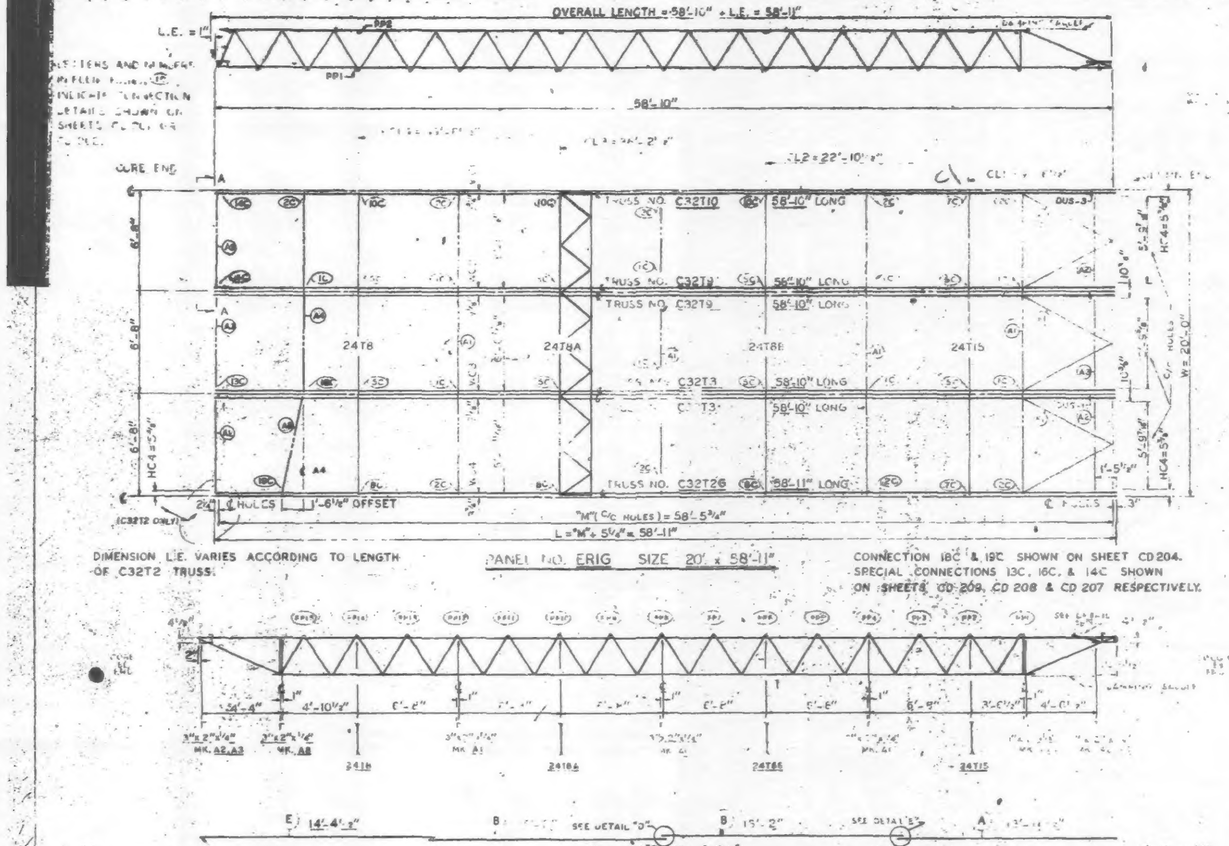


[illegible]	4-15-68
[illegible]	5-10-68
[illegible]	[illegible]
[illegible]	5-6-68
[illegible]	4-1-68
[illegible]	1-30-68
[illegible]	4-15-68
[illegible]	5-10-68

James in Lite 8/9/68

LACLEDE STEEL CO.

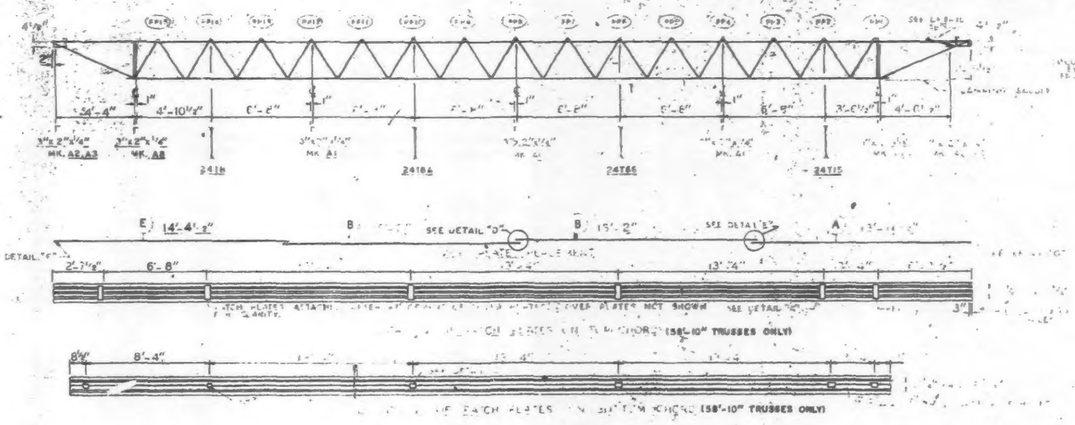
FP ERIA

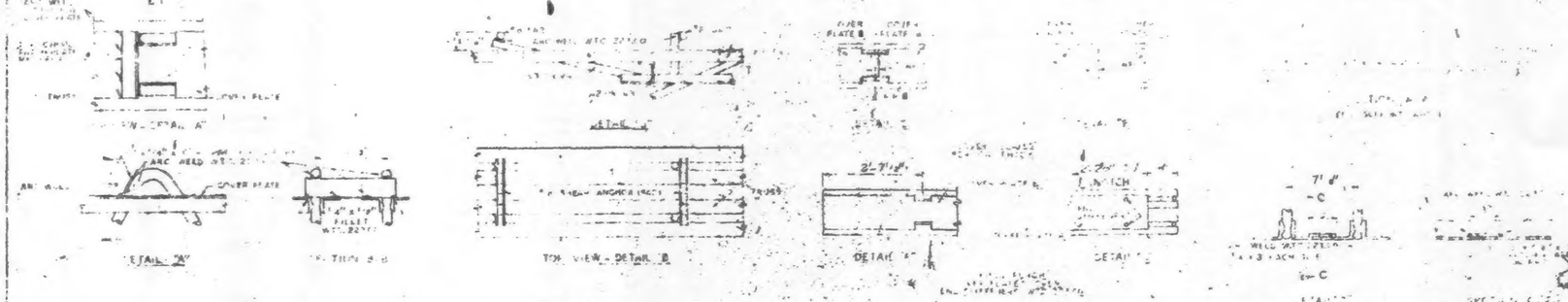


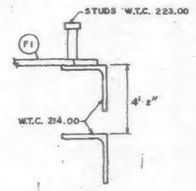
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIG SIZE 20' x 58'-11"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.







CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

TYP. EACH FLAT

3"x 2"x¼" ANGLE	A1	2	3"x2"x¼" x 8'-8"	ST 402
	A2	4	3"x2"x¼" x 8'-8"	ST 403
	A3	2	3"x2"x¼" x 13'-3"	ST 404
	A4	1	3"x2"x¼" x 13'-3"	ST 405
	A8	1	3"x 2"x¼" x 6'-8½"	ST 406
CLIP ANGLE PLATE	F1	6	1"x 8"x 8'-8"	ST 402
ANGLE CLIPS	C1	20	3"x2"x¼" x 4"x 0'-6"	ST 400
	C2	4	3"x2"x¼" x 4"x 5"	ST 401
CONNECTION PLATE	FB1	2	¾" x 8" x 1'-3"	ST 400
	FB2	8	¾" x 8" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-8"x3/8"x 8½"	ST 400
	P2	1	4'-8" x .30"x 0'-8"	ST 400
	P3	1	4'-8" x .30" x 1'-0"	ST 400
	P5	3	4½" x 1"x 1'-6"	ST 400
	P8	1	4'-8" x .30" x 0'-8"	ST 401
8 SHEAR ANCHOR	SA2	8	8 HEADS x 0'-2"	ST 400
PATCH PLATES	PP1	18	2"x 1'-6" x 0'-9"	ST 400
	PP2	18	3"x 1'-6" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

CHORD SECT. 3 & 10	5-15-68
CHORD SECT. 12	5-16-68
CHORD SECT. 4, 5, 8 & 9	5-17-68
WEB MEMBERS A & B	5-17-68
WEB MEMBERS A2	5-17-68
WEB MEMBERS L	10-20-68
WEB MEMBERS J	5-15-68
WEB MEMBERS A8, 6, 7 & 8	5-10-68

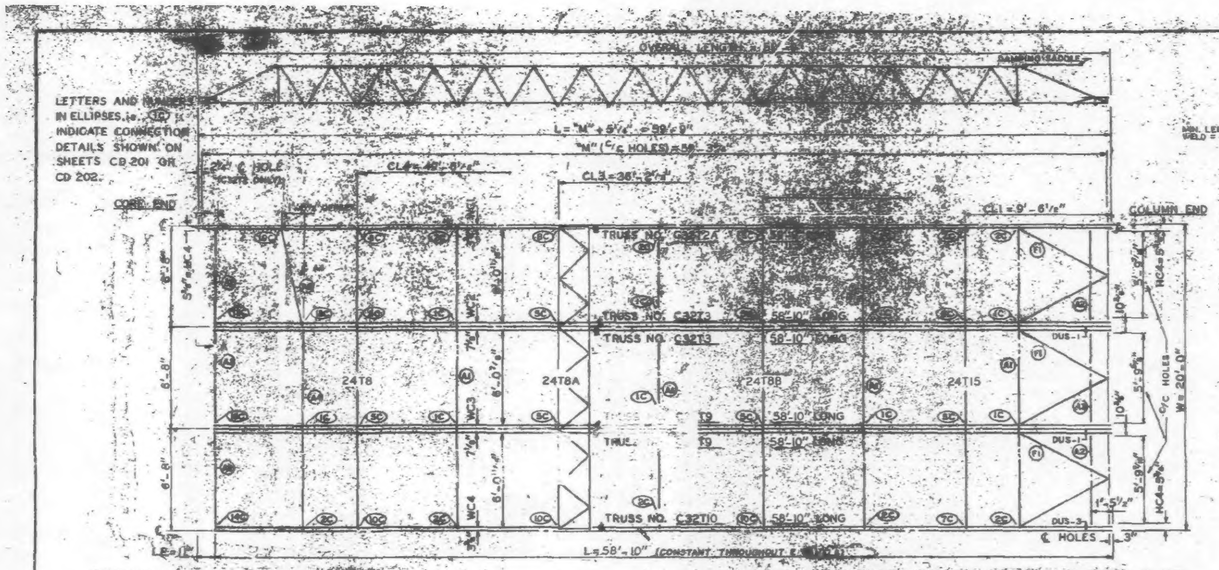
10-11,39 (NORTH)

PANEL ERIG SIZE 58'-11"

DRAWING

DATE JULY 22, 1968

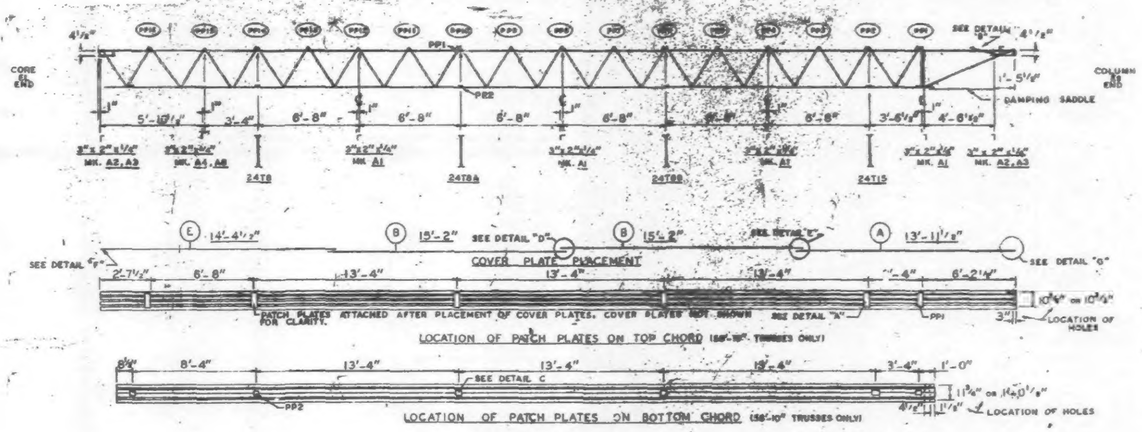
JACKSON STEEL CO. FP ERIG

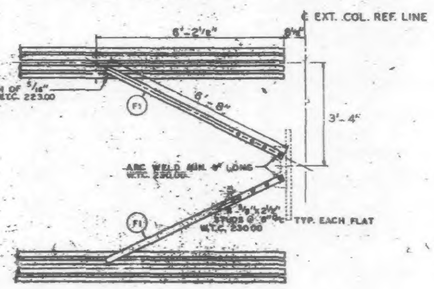


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

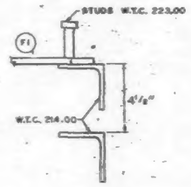
PANEL NO. E1A SIZE 20' x 59'-9"

"CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

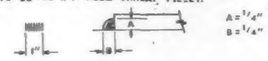


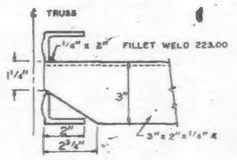
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

[1] REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2A	1	C32T2A - 58'-9"	ST 202A
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'-11"	ST 208B
	T15	1	24T15 - 18'-11"	ST 215
3"x 2"x1/4" ANGLE	A1	4	3" x 2" x1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x1/4" x 5'-11 5/8"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 5/8"	ST 403
	A4	1	3" x 2" x1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x1/4" x 61-8 3/8"	ST 405
DIAGONAL FLATS	F1	6	1 1/2" x 5/16" x 1'-8"	ST 405
COVER PLATES	A	3	8" x .0135" x 18'-10 1/2"	ST 303
	B	8	8" x .0135" x 19'-2"	ST 303
	E	3	8" x .0135" x 14'-8 1/8"	ST 303
ANGLE CLIP	C1	20	2" x 2" x 3/16" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6 1/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 2'-6 1/8"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 7/16" ϕ x 1'-3"	ST 400
	CB3	8	1 5/16" ϕ x 1'-3"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	1	4 1/2" x .374" x 1'-0"	ST 400
	P3	1	4 1/2" x .374" x 1'-0"	ST 400
	F5	3	4 1/2" x 1 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .374" x 0'-4"	ST 401
7/8 SHEAR ANCHOR	SA2	6	7/8 REBAR x 0'-3"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400

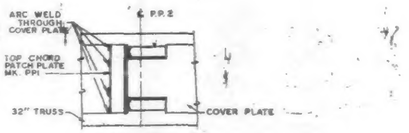
[1] ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

[2] UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

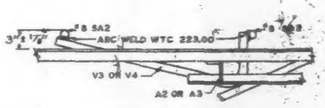




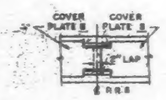
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



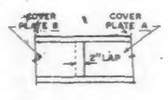
TOP VIEW - DETAIL "A"



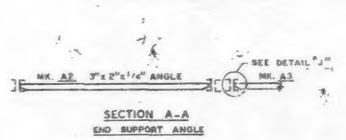
DETAIL "B"



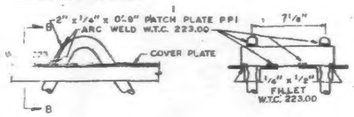
DETAIL "D"



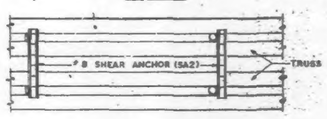
DETAIL "E"



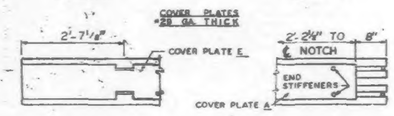
SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

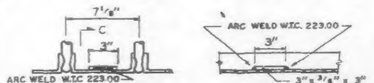


TOP VIEW - DETAIL "B"



DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C" SECTION C-C

REF. DRWGS.

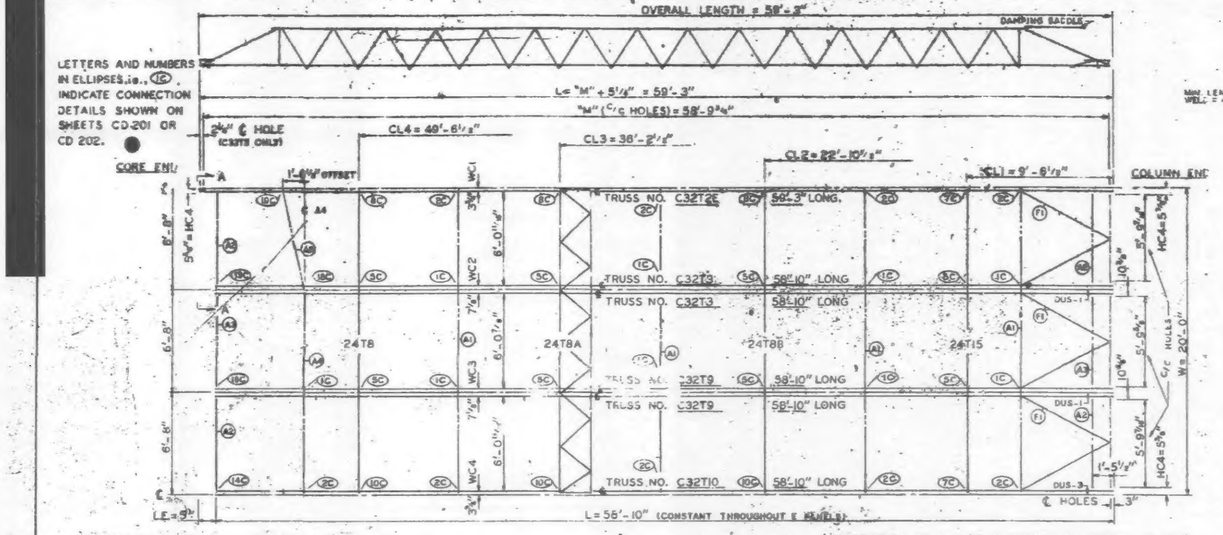
7-A82-3,8,10	4-15-68
7-A83-11	5-10-68
7-A84-3,31 & 39	1-3-68
7-A84-15 & 16	5-8-68
7-A84-42	4-1-68
SA-124	10-26-68
7-A81-3	4-15-68
7-A81-6,7 & 8	5-10-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68.
69 (NORTH) PANEL E1A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

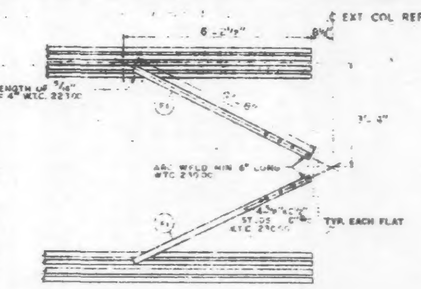
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-11 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 8/16/68	DRAWN BY gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE JULY 22, 1968	IN CHARGE OF PROJ. DEPT.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP E1A



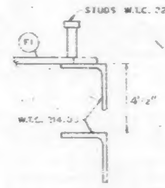
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1E SIZE 20' x 59'-3"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD JOINT END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

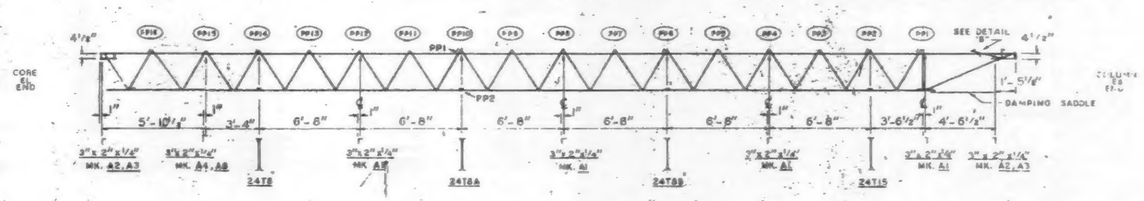


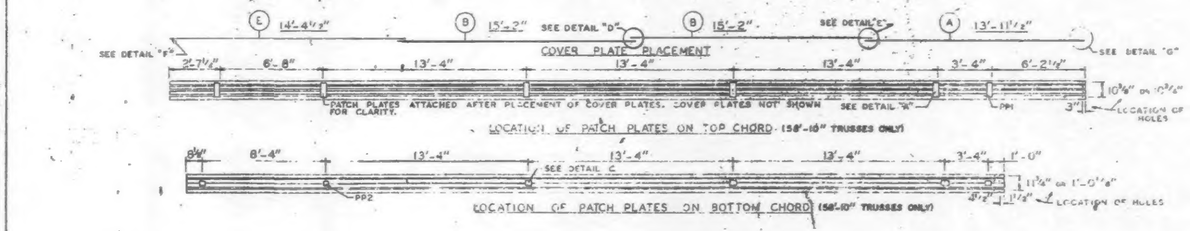
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

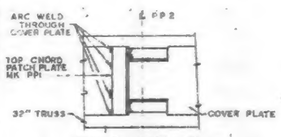
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
CHORD TRUSSES	T2E	1	C32T2E - 58'-3"	ST 202E
	T3	2	C32T3 - 58'-10"	ST 202
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	6	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-10 3/16"	ST 403
	A4	1	3" x 2" x 1/4" x 14'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-6 3/16"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 1/2" x 6'-9"	ST 402
COVER PLATES	A	3	0" x .0135" x 13'-11 1/2"	ST 303
	B	6	0" x .0135" x 15'-2"	ST 303
	E	3	0" x .0135" x 14'-4 1/2"	ST 303
FILLER CLIPS	C1	28	2 1/2" x 1/4" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1/4" x 1/4" x 0'-8"	ST 400
DAMPING SADDLE	DUS-2	2	3/16" x 3/16" x 3/16" x 3'-2 7/8"	ST 298
	DUS-3	1	3/16" x 3/16" x 3/16" x 3'-2 7/8"	ST 298
CONNECTION BAR	CB1	1	1" ¢ x 1'-3"	ST 400
	CB2	6	7/8" ¢ x 1'-3"	ST 400
	CB3	6	1 3/8" ¢ x 1'-5"	ST 400
CONNECTION PLATES	PJ1	5	3 1/2" x 7/8" x 1'-1"	ST 400
	PC	1	4 1/2" x 3/4" x 1'-6"	ST 400
	PD	1	4 1/2" x 3/4" x 1'-0"	ST 400
	PE	3	4 1/2" x 1 1/4" x 1'-6"	ST 400
	PF	1	4 1/2" x 7/8" x 1'-2"	ST 401
"B" SHEAR ANCHOR	SA2	C	" ¢ HEAD x 0'-4"	ST 405
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROCEN RODS IN THE E-70 SERIES OR EQUAL.

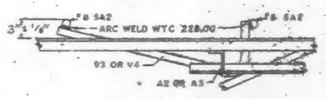
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



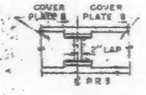




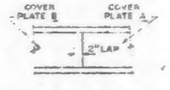
TOP VIEW - DETAIL "A"



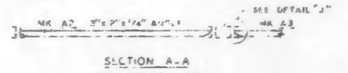
DETAIL "B"



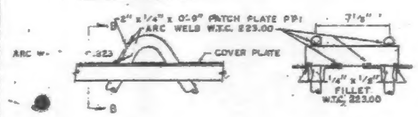
DETAIL "D"



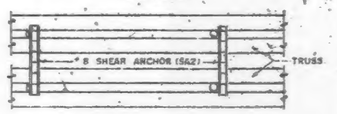
DETAIL "E"



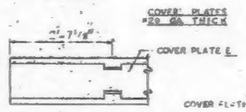
SECTION A-A
END SUPPORT ANGLE



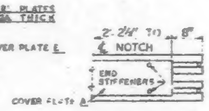
DETAIL "K" SECTION B-B



TOP VIEW - DETAIL "B"



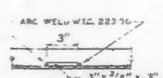
DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "C"



SECTION C-C

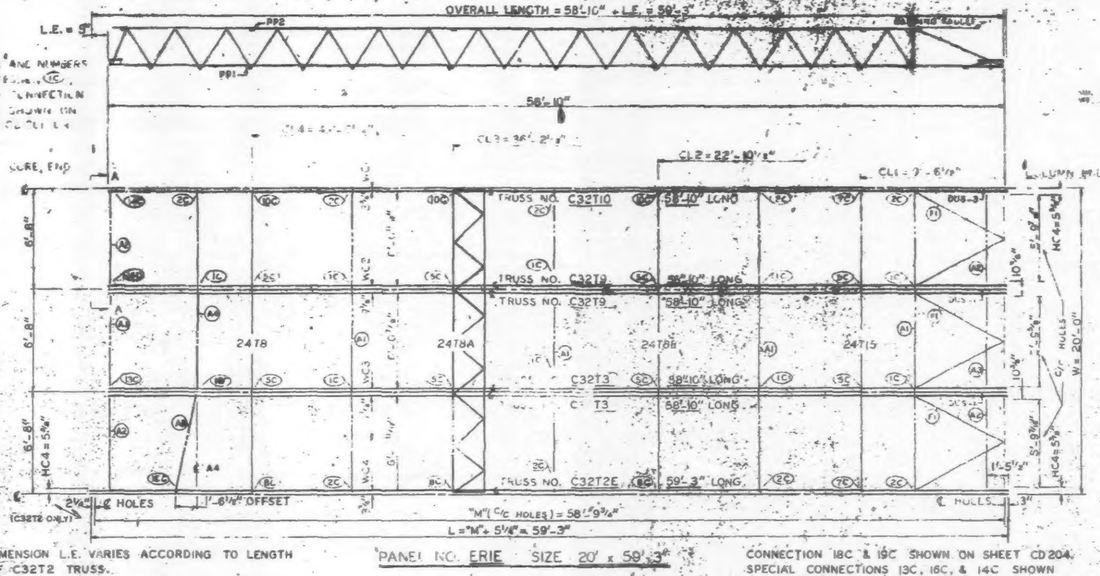
PREF. DRWGS.		
7-A82-9 & 10	4-15-68	
7-A87-11	5-10-68	
7-A84-3, 3.1 & 39	1-3-68	
7-A84-15 & 16	5-6-68	
7-A84-42	4-1-68	
SA-124	10-20-66	
7-A81-3	4-15-68	
7-A81-6, 7 & 8	5-10-68	

FLOOR PANEL DETAILS
FOR
AGRICULTURE TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
BAY (NORTH) PANEL E1E - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

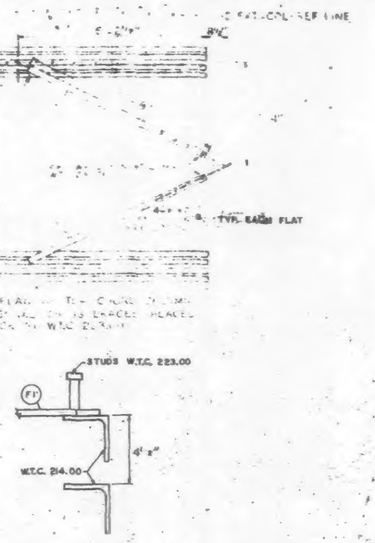
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 A83-31 & 5-10-68	PLATE
APPROVED FOR FABRICATION BY [signature] FOR FUNK &	DATE 9/19/68	DRAWN BY gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATION	DATE	CHECKED BY T.M.CHURA DATE JULY 22, 1968	IN CHARGE OF PROJ. DEV.
DETAILED BY A. CARL WEBER LACLEDE STEEL CO.		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP E1E



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIE SIZE 20' x 59'-3"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

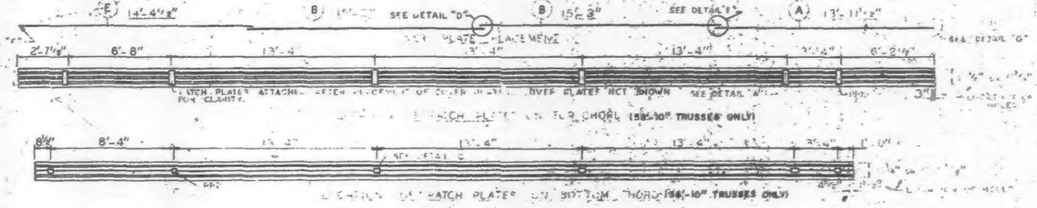


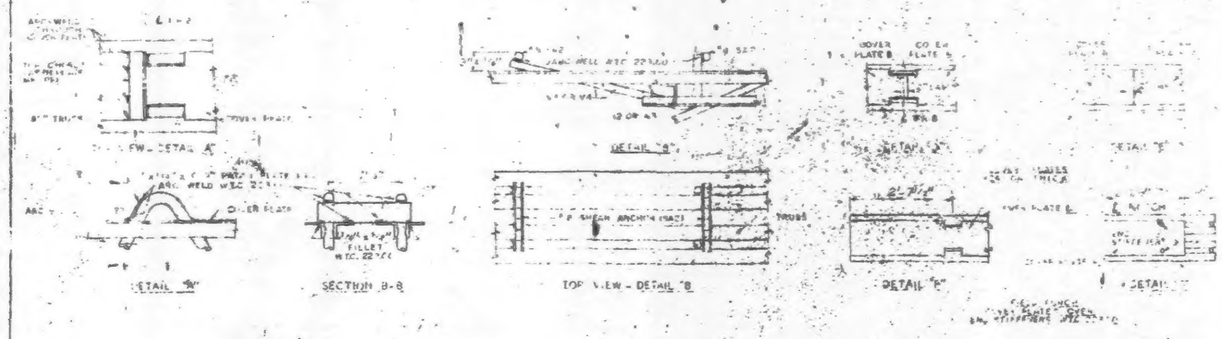
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

				REF. DRWG.
			SIZE	
	2E	1	1/16" E - 59'-3	ST 205E
	3	1	58'-10"	ST 203
	9	1	58'-10"	ST 209
	10	1	C32T10 58'-10"	ST 310
	7	1	24T7	ST 208
	18A	1	24T8A	ST 208A
	18E	1	24T8E	ST 208B
	15	1	24T15	ST 215
3"x 2"x1/4" ANGLE	A1	6	3" x 2" x 1/4" x 6'-11"	ST 403
	A2	6	3" x 2" x 1/4" x 9'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 7'-11"	ST 403
	A4	1	3"x2" x 1/4" x 13'-3"	ST 403
	AB	1	3" x 2" x 1/4" x 61'-8"	ST 405
DIAGONAL FLAT	F1	6	1/2" x 8" x 8'-8"	ST 402
	A	1	8" x 0'-8 1/2" x 10'-11"	ST 303
	B	7	8" x 0'-8 1/2" x 10'-11"	ST 303
	L	1	6" x 0'-8 1/2" x 14'-6"	ST 303
ANGLE CLIPS	C1	20	2" x 1/4" x 1'-0"	ST 400
	C2	4	2" x 1/4" x 1'-0"	ST 401
AMERICAN [illegible]	[illegible]	2	[illegible]	ST 208
	[illegible]	1	[illegible]	ST 208
CONNECTION PAD	CB1	1	1" x 3"	ST 402
	CB2	6	1" x 1'-5"	ST 400
	CB3	8	1" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6'-1"	ST 400
	P2	1	4'-8" x .38" x 0'-8"	ST 400
	P3	1	4'-8" x .38" x 1'-0"	ST 401
	P5	3	4'-8" x 1/4" x 1'-0"	ST 400
	P8	1	4'-8" x .38" x 0'-8"	ST 401
8" SHEAR ANCHOR	SA2	8	8" SHEAR x 0'-9"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 1/4" x 0'-9"	ST 400

(1) ALL FRC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION FRC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





	3.10	4-15-68
	12	5-10-68
	3.10	4-15-68
	8.16	5-10-68
	12	4-15-68
	24	5-10-68
	3	4-15-68
	6 & 24	5-10-68

10-11 (SOUTH)

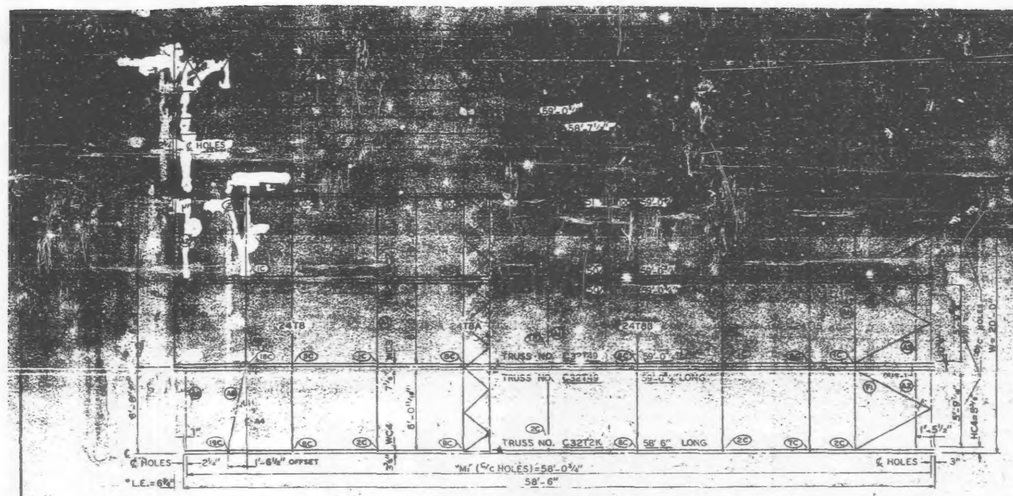
ERIE

5/11/68

JULY 22, 1968

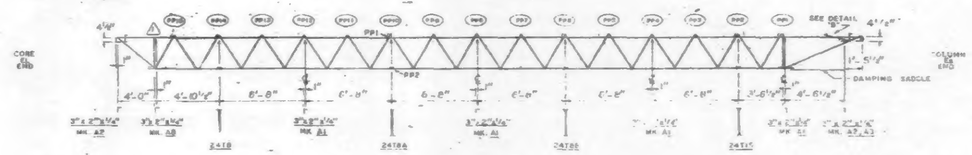
LACLEDE STEEL CO.

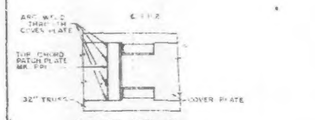
ERIE

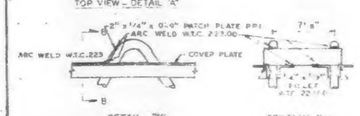


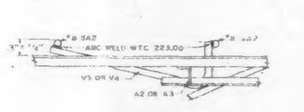
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.

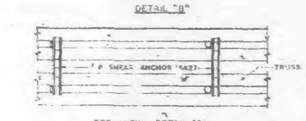
PANEL NO. ER5K SIZE 20' x 59'-0¾"

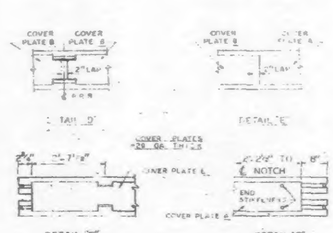


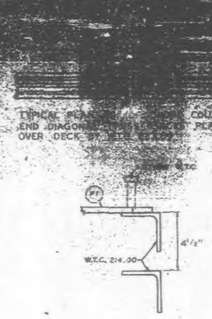










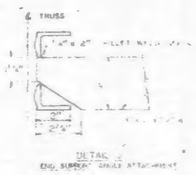


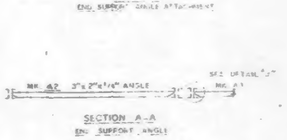
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS' BEARING.

ANGLE CLIPS	C1	2	6"x4"x½"x 0'-8"	ST 400
	C2	4	6"x4"x½"x 0'-8"	ST 400
DIAGONAL SADDLE	DS1	2	¼" x 6" x 0'-8"	ST 400
	DS2	1	¼" x 6" x 0'-8"	ST 400
COMMON BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB2	8	⅞" ø x 1'-3"	ST 400
	CB3	8	⅞" ø x 1'-8"	ST 400
CONNECTION PLATES	P1	5	3½"x¾"x 0'-6½"	ST 400
	P2	1	4½"x .39"x 0'-6"	ST 400
	P3	1	4½"x .36"x 1'-0"	ST 400
	P5	3	4½"x ½"x 1'-8"	ST 400
	P6	1	4½"x ¾"x 0'-4"	ST 400
"B" SHEAR ANCHOR	SA2	6	¾" ø HEADED x 0'-4"	ST 410
PATCH PLATES	PP1	18	2"x¼"x 0'-9"	ST 400
	PP2	18	3"x¾"x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" ø FILLET FILLET.





NO.	DATE	REVISION	BY
3	3-11-68	LOCATION OF PATCH PLATE	GDC

REF. DRWGS.

A-882-181	7-22-66
T-483-74	11-25-66
T-484-1	10-16-68
T-484-4 & 6	7-22-66
T-484-42	10-13-66
SA-224	12-11-68
T-481-3	7-22-66
T-481-4,45 & 46	11-25-66

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)

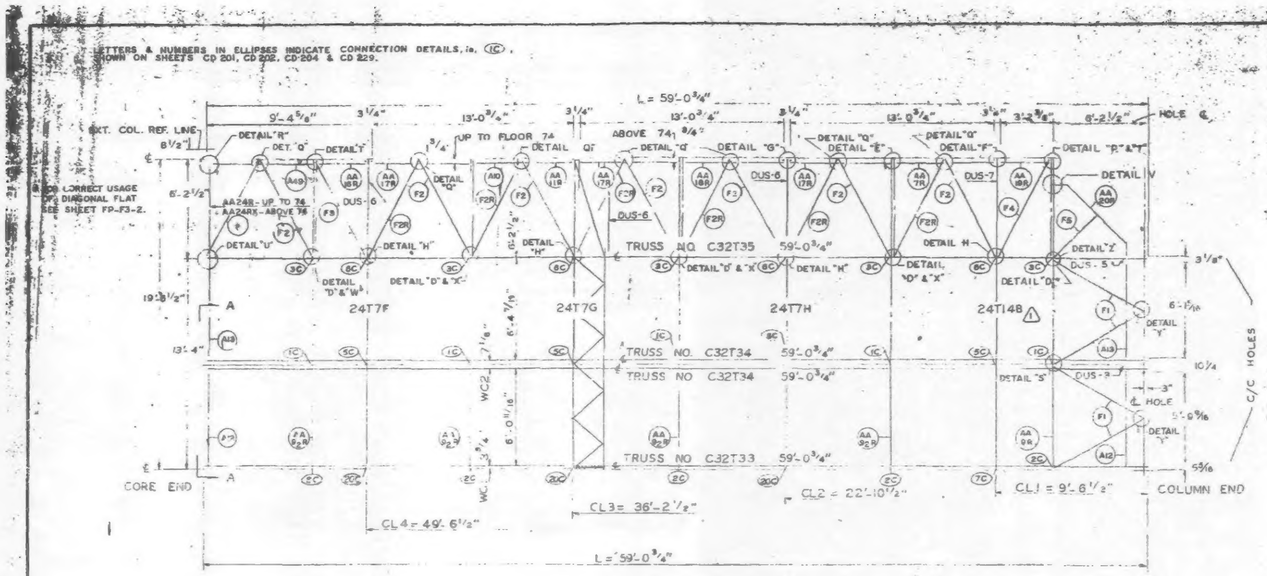
PANEL ER5K 20' x 59'-0¾"

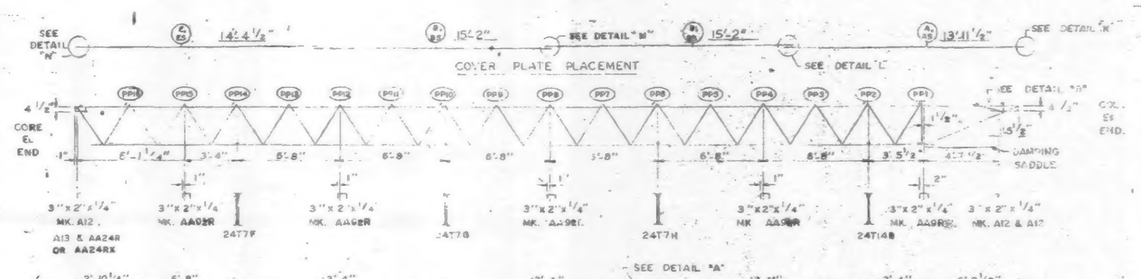
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION DATE 3/14/69
APPROVED FOR FABRICATION DATE
BY FOR FABRICATION
LACLEDE STEEL CO. DETAILED BY ERIC WEBER

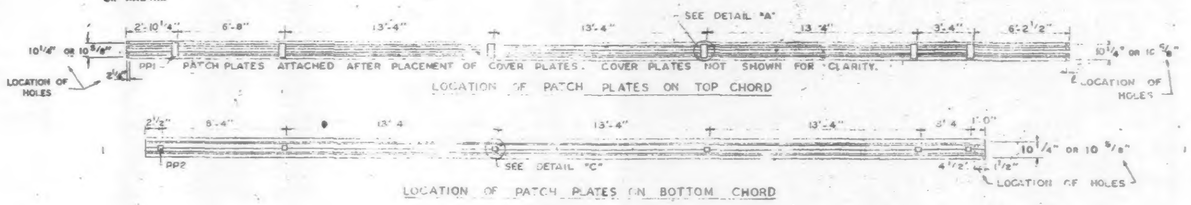
DESIGN DRAWING NO. T-483-74
DRAWN BY GDC DATE JAN 15 1969
CHECKED BY T.H.CHUNG DATE JAN 15, 1969
FABRICATION CONT NO. W.T.C. 221

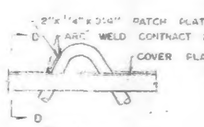
PLATE
IN CHARGE OF PROD. DEPT.
PP ER5K

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1C), SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 229.

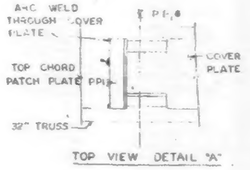




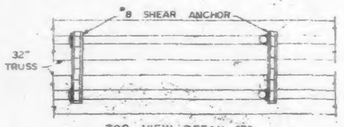




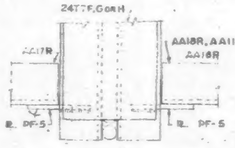
DETAIL "A" SECTION D-D



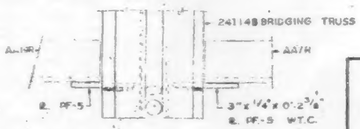
TOP VIEW DETAIL "A"



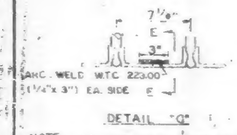
TOP VIEW - DETAIL "B"



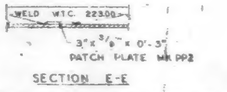
SECTION G-G



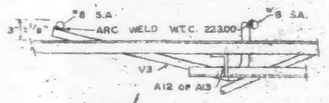
SECTION F-F



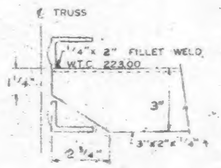
DETAIL "C"



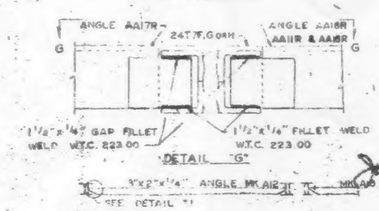
SECTION E-E



DETAIL "B1"

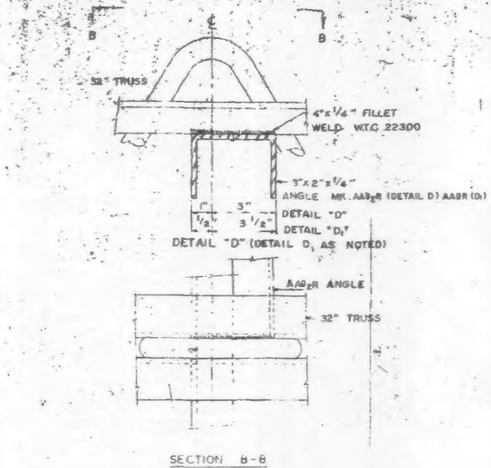


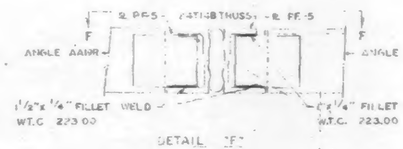
DETAIL "J" END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)



DETAIL "G" SECTION A-A END SUPPORT ANGLES

NOTE. 1 ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2 UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3 SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET





DETAIL "F"

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	ST 207F
	T7G	1	24T7G - 19'-6"	ST 207G
	T7H	1	24T7H - 19'-6"	ST 207H
	T14B	1	24T14B - 19'-6"	ST 214B
3"x 2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x2'-10 1/16"	ST 404
	A13	2	3"x2"x1/4"x6'-3 7/16"	ST 404
	A2	2	3"x2"x1/4"x5'-11 15/16"	ST 404
	A49	1	3"x2"x1/4"x6'-0"	ST 413
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST 406
	AA9R	1	SEE REF. DRWG.	ST 406
	AA9RR	4	SEE REF. DRWG.	ST 406
	AA11R	1	SEE REF. DRWG.	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
**(AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74)	AA7R	3	SEE REF. DRWG.	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
	AA9R	1	SEE REF. DRWG.	ST 406
**	AA24R	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F1	4	1 1/2"x 7/8"x 6'-8"	ST 402
	F2	4	1 1/2"x 7/8"x 6'-10 1/2"	ST 402
	F3	4	1 1/2"x 5/8"x 6'-11 1/4"	ST 402
	F4	1	1 1/2"x 3/8"x 7'-0"	ST 402
	F5	1	1 1/2"x 7/8"x 4'-3"	ST 402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-9"	ST 400
	PP2	6	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	1	9"x.0135"x13'-11 1/2"	ST 303
	B	2	9"x.0135"x15'-2"	ST 303
	E	1	9"x.0135"x14'-4 1/2"	ST 303
	A5	1	3 1/2"x.0135"x13'-11 1/2"	ST 303
	B5	2	3 1/2"x.0135"x15'-2"	ST 303
	E5	1	3 1/2"x.0135"x14'-4 1/2"	ST 303
ANGLE CLIPS	C2	4	2 1/2"x 1 1/4"x 1/4"x 0'-6"	ST 400
	C1	12	2"x 1 1/2"x 1/4"x 0'-6"	ST 400
DAMPING SADDLE	DS-3	1	1'-5"x 3 1/2"x 3/8"x 3'-8 7/8"	ST 298
	DS-5	1	3'-6"x 5"x 3/8"x 4'-7 7/8"	ST 299
	DS-6	3	3 1/2"x 3'-2"x 3/8"x 4'-4 7/8"	ST 299
	DS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-3 9/16"	ST 298
MISC. PLATES	PF-4	2	1'-2"x 1'-2"x 0'-4"	ST 400
	PF-3	6	3 1/2"x 3 3/8"x 0'-5"	ST 400
CONN. ANGLE	C5	1	3"x 2"x .37"x0'-3"	ST 413
FLAT ASSEMBLY	FBBR	*	SEE REF. DRWG.	ST 415
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-9"	ST 400
CORNER ANGLE ASSEMBLY	AA2RR	1	SEE REF. DRWG.	ST 405

NO	DATE	REVISION	BY
1	8-4-69	AS NOTED	CWC

REF. DRWG.		SA-124	1-6-69
7-AB1-30	1-6-69	7-AB4-14,16,1	10-15-68
7-AB1-31	1-6-69	7-AB4-15,16	7-22-68
7-AB1-32	1-6-69	7-AB4-21	7-22-68
7-AB2-16	1-6-69	7-AB4-23,25	7-22-68
7-AB2-9	1-6-69	7-AB4-29	1-3-68
7-AB3-41	1-6-69	7-AB4-39-41,43	7-22-68
7-AB3-52	1-6-69	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-45	12-20-68

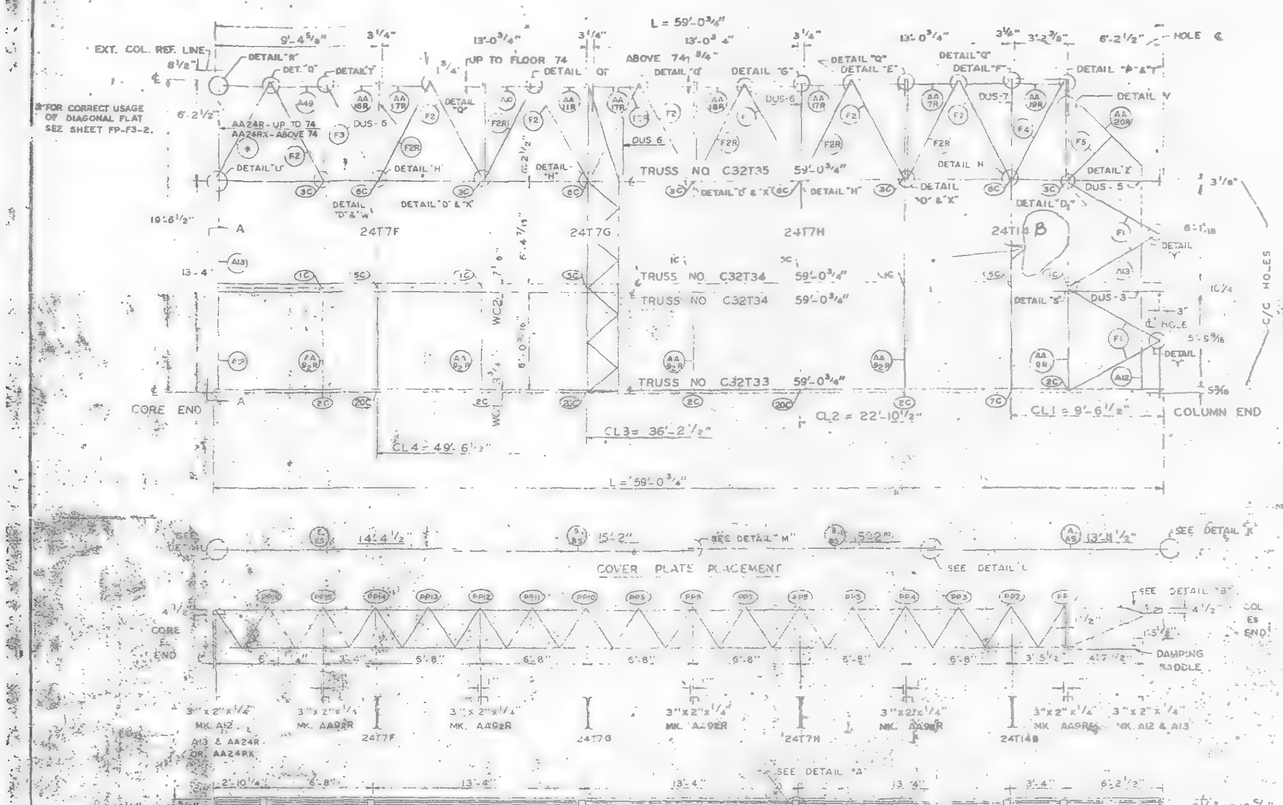
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

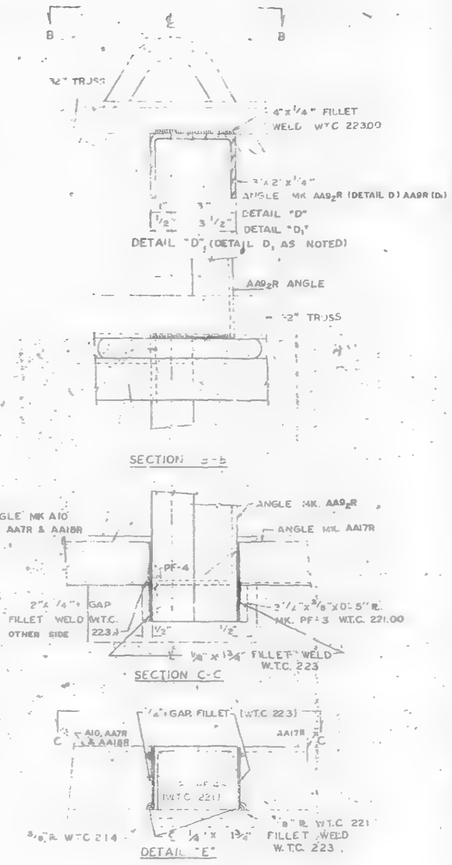
BLDG A FLOORS 78 (NORTH & SOUTH) 44 (NORTH ONLY)
PANEL FR3 19'-6" x 59'-0 3/4"
BLDG B FLOORS 44 & 78 (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

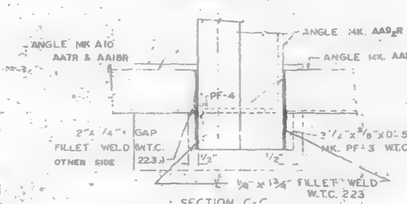
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-52	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 8/11/69	DRAWN BY: D.R. DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY:	DATE	CHECKED BY: T.M. OHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR3

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1C), SHOWN ON SHEETS CD 201, CD 202, CD 204, & CD 229.

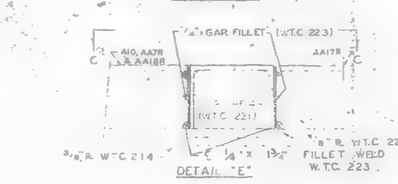




SECTION B-B

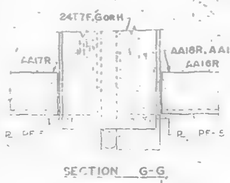


SECTION C-C

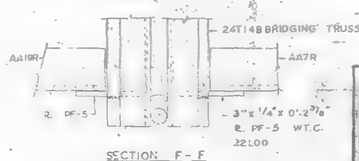


DETAIL "E"

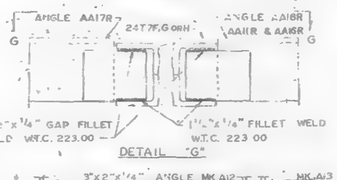
DETAIL "F"



SECTION G-G

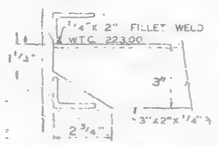


SECTION F-F

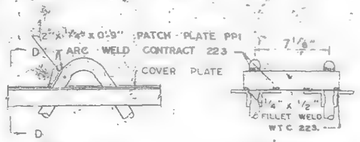


DETAIL "G"

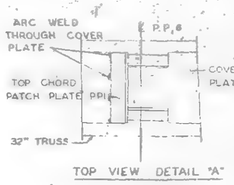
SECTION A-A
END SUPPORT ANGLES



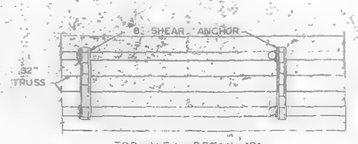
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)



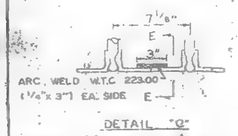
DETAIL "A" SECTION D-D



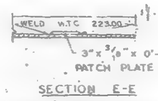
TOP VIEW DETAIL "A"



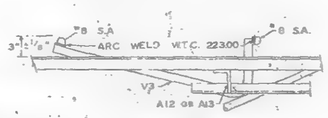
TOP VIEW-DETAIL "B"



DETAIL "C"



SECTION E-E



DETAIL "B"

NOTE: 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS. IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F3-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	NOS.	SIZE	
FLOOR TRUSSES	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T34	2	C32T34 - 59'-0 3/4"	ST 234
	T35	1	C32T35 - 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F - 19'-6"	BT207F
	T7G		24T7G - 9'-6"	BT207G
	T7H	1	24T7H - 49'-6"	BT207H
	T14B	1	24T 48 - 19'-6"	BT214B
3"x 2"x 4" ANGLES	A3	5	3"x 2"x 1/4" x 6'-3 7/8"	ST414
	A4	2	3"x 2"x 1/4" x 6'-11 15/16"	ST414
	A49	1	3"x 2"x 1/4" x 6'-0 11/16"	ST412
ANGLE ASSEMBLY **(AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74)	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9ZR	4	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST400
	AA19R	1	SEE REF. DRWG.	ST400
	AA24R	1	SEE REF. DRWG.	ST412
DIAGONAL FLATS	F1	4	1 1/2" x 3/8" x 6'-8"	ST402
	F2, F2R	7	1 1/2" x 3/8" x 6'-10 1/2"	ST402
	F3	4	1 1/2" x 3/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8" x 7'-0"	ST402
	F5	1	1 1/2" x 3/8" x 4'-4"	ST402
PATCH PLATES	PP-2	6	2" x 1/4" x 0'-9"	ST400
	PP-3	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST303
	B	2	9" x .0135" x 15'-2"	ST303
	E	1	9" x .0135" x 14'-4 1/2"	ST303
	B5	1	3 1/2" x .0135" x 13'-11 1/2"	ST303
	B6	2	3 1/2" x .0135" x 15'-2"	ST303
	E4		3 1/2" x .0135" x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	4	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST400
	C1	12	2" x 1 1/2" x 1/4" x 0'-6"	ST400
DAMPING SADDLE	DUS-3	1	3" x 2" x 3 1/4" x 3'-8" x 3'-8 7/8"	ST298
	DUS-5	1	3 1/2" x 3 1/4" x 3/8" x 3'-8 7/8"	ST299
	DUS-6	9	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
MISC. PLATES	FP-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF-3	5	3" x 3/8" x 0'-5"	ST400
CONN. ANGLE	C5	1	3"x 2" x 37"x0'-3"	ST 413
FLAT ASSEMBLY	F8BR	*	SEE REF. DRWG	ST 415
"B SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST 400
CORNER - ANGLE ASSEMBLY	AA29R		SEE REF. DRWG	ST 405

NO	DATE	REVISION	BY

REF. DRWG.		SA-124	1-6-69
7-AB1-30	1-6-69	7-AB4-14,14.1	10-15-68
7-AB1-31	1-6-69	7-AB4-15,16	7-22-68
7-AB1-32	1-6-69	7-AB4-21	7-22-68
7-AB2-16	1-6-69	7-AB4-23-25	7-22-68
7-AB2-9	1-6-69	7-AB4-29	1-6-68
7-AB2-41	1-6-69	7-AB4-39-41,43	7-22-68
7-AB3-52	1-6-69	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-45	12-20-68

SKILLING HELLE CHRISTIANSEN ROBERTSON Structural & Civil Engineers

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A- FLOORS 78 (NORTH & SOUTH) 44 (NORTH ONLY)

PANEL FR3 19'-6" x 59'-0 3/4"

BLDG B FLOORS 44 & 78 (NORTH & SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-58	PLATE 5
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: R.R. DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A.CARL WEBER		FABRICATION CONTR. NO. W.T.C. 221	SHEET NO. FP-FR3

LETTERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.

CORE END

"M" + 5¼" = 59'-0¾"

"M" (℄ HOLES) = 58'-7½"

℄ HOLES

CL4 = 40'-6½"

CL3 = 36'-2⅛"

CL2 = 22'-10⅛"

CL1 = 9'-2⅛"

TRUSS NO. C32T33 59'-0¾" LONG

TRUSS NO. C32T32 59'-0¾" LONG

TRUSS NO. C32T32 59'-0¾" LONG

TRUSS NO. C32T38 59'-0¾" LONG

TRUSS NO. C32T38 59'-0¾" LONG

TRUSS NO. C32T37N 57'-9" LONG

24T8C 24T8D 24T8E 24T15

MC1 MC2 MC3 MC4

W = 20'-0"

℄ HOLES 2¼" 1'-6½" OFFSET ℄ HOLES 3"

"M" (℄ HOLES) = 57'-3¾"

57'-9"

L.E = 1'-3¾"*

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T37.

PANEL NO. ERBN SIZE 20' x 59'-0¾"

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15

SEE DETAIL "B"

4½"

CORE ℄

COLUMN ℄ END

DAMPING SADDLE

3'-3" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6½"

MK. A2 MK. A8 MK. A1 MK. A1 MK. A1 MK. A1 MK. A1 MK. A2, A3

24T8C 24T8D 24T8E 24T15

14'-4½" 15'-2" SEE DETAIL "D" 15'-2" SEE DETAIL "E" 13'-11½" SEE DETAIL "G"

COVER PLATE PLACEMENT

2'-10¼" 6'-8" 13'-4" 13'-4" 7'-4" 5'-7½"

LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A"

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

SEE DETAIL "C"

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)

TOP VIEW - DETAIL "A"

DETAIL "A"

SECTION B-B

DETAIL "B"

TOP VIEW - DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

TYPICAL PLAN OF TOP CHORD COLUMN END. DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

SECTION A-A END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

MATERIAL	MK.	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES	T32	2	C32T32 - 56'-0¼"	ST 232
	T33	1	C32T33 - 59'-0¾"	ST 233
	T37N	1	C32T37N - 57'-9"	ST 237N
	T38	2	C32T38 - 59'-0¾"	ST 238
BRIDGING TRUSSES	T8C	1	24T8C - 10'-11"	ST 248C
	T8D	1	24T8D - 18'-11"	ST 248D
	T8E	1	24T8E - 18'-11"	ST 248E
	T15	1	24T15 - 10'-11"	ST 215
3" x 2" x ¼" ANGLE	A1	4	3" x 2" x ¼" x 10'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-5½"	ST 403
	A3	2	3" x 2" x ¼" x 5'-10½"	ST 403
	A4	1	2" x 2" x ¼" x 3"	ST 403
	A8	1	3" x 2" x ¼" x 6'-3½"	ST 403
DIAGONAL FLATS	F1	6	4" x 2" x ⅜" x 5"	ST 403
COVER PLATES	A	3	PL 0.135" x 13'-4½"	ST 303
	B	4	PL 0.135" x 15'-2"	ST 303
	E	1	PL 0.135" x 4'-6½"	ST 303
ANGLE CLIP	C6	2	2" x 2" x ¼" x 6"	ST 402
	C7	4	2" x 2" x ¼" x 7"	ST 402
DAMPING SADDLE	DS-1	2	PL ½" x 3" x 3'-6"	ST 238
CONNECTION BAR	CB	1	PL ½" x 3" x 2'-0"	ST 403
	CB2	1	PL ½" x 3" x 4'-0"	ST 403
CONNECTION PLATES (2)	P15	6	PL ⅜" x 2'-9" x 2'-5½"	ST 415
	P5	1	PL ⅜" x 3" x 2'-0"	ST 400
	P8	1	PL ⅜" x 2'-6" x 1'-4"	ST 400
	P7	1	PL ⅜" x 2'-6" x 1'-0"	ST 400
	P6	1	PL ⅜" x 2'-6" x 1'-4"	ST 400
	P4	1	PL ⅜" x 2'-6" x 1'-4"	ST 400
	P1	1	PL ⅜" x 2'-6" x 1'-4"	ST 400
	P2	1	PL ⅜" x 2'-6" x 1'-4"	ST 400
8 SHEAR ANCHORS	SA2	18	⅞" DIA. x 5" LONG	ST 300
PATCH PLATES	PP1	10	PL ½" x 3'-6" x 1'-0"	ST 400
	PP2	18	PL ½" x 3" x 1'-0"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 4" FULL THROAT FILLET.

8-4-69	AS NOTED	G.D.C.
4-24-69	AS NOTED	G.D.C.

	22.58
	6-6-69
	6-15-69
	6-22-69
	6-5-69
	1-6-69
29 & 30	1-6-69
33 & 34	1-6-69
7-AB2-19	1-6-69

WORLD TRADE CENTER NO. 1

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (SOUTH ONLY)

PANEL ERBN - SIZE 59'-0¾"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY P.O.N.Y.A. FOR P.O.N.Y.A. DATE 8/11/69

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

DETAILED BY A. CARL WEBER

SHOP DRAWING NO. A-23.61 SHEET

DRAWN BY DATE APRIL 2, 1969

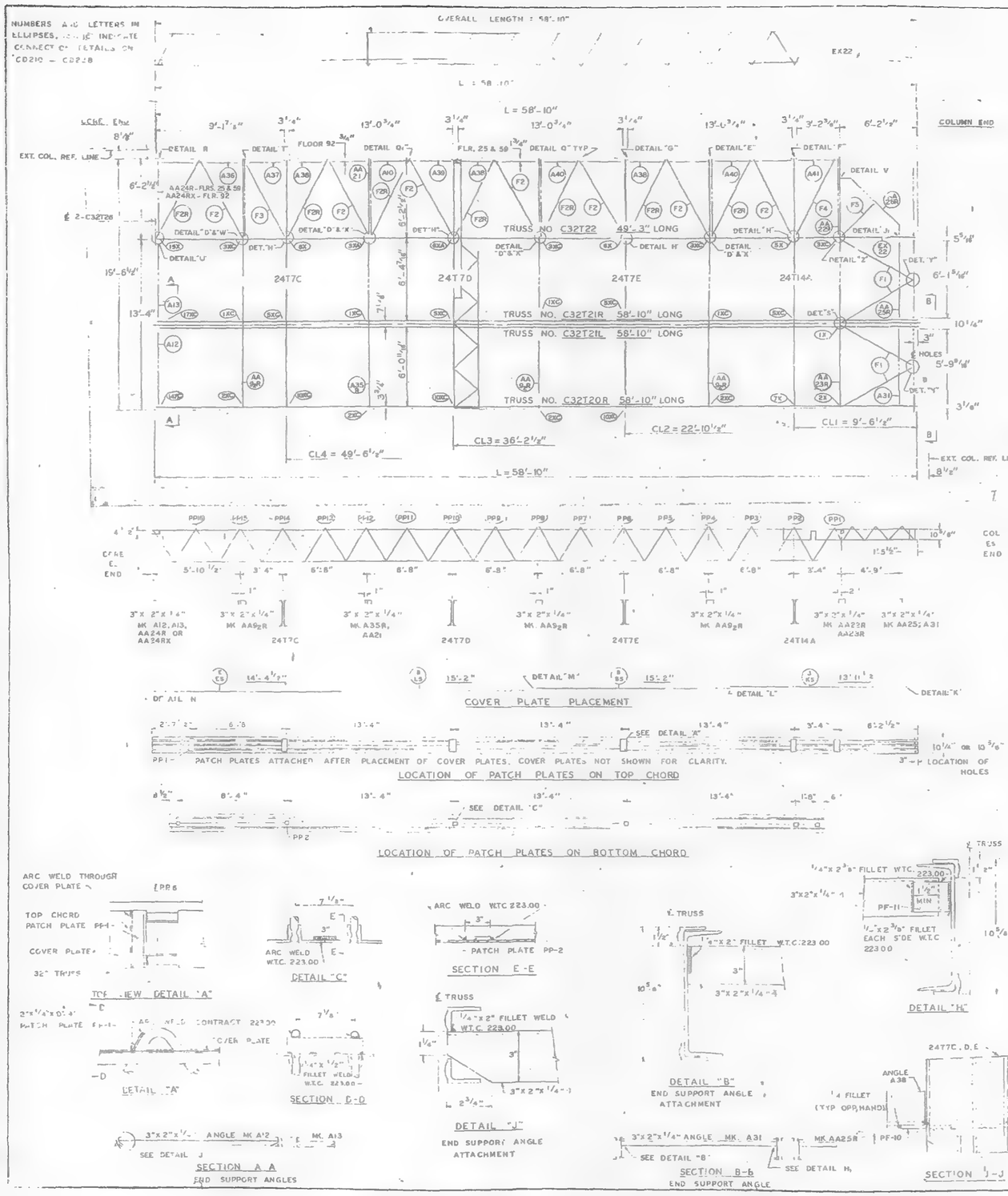
CHECKED BY T.M.CH.-A DATE APRIL 2, 1969

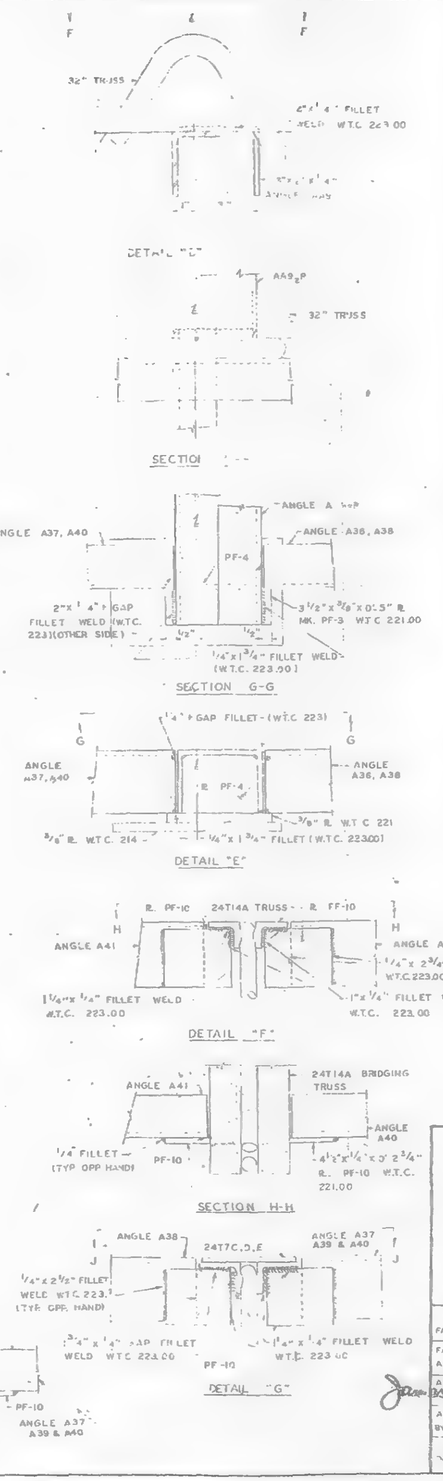
FABRICATION CONT. NO. W.T.C. 221

IN CHARGE OF PROD. DEV.

SHEET NO. FP ERBN

NUMBERS AND LETTERS IN ELLIPSES, AS SHOWN INDICATE CONNECTION DETAILS ON CD210 – CD228





REQUIRED MATERIAL ITEM TABLE				REF. DRWG
MATERIAL	MK	L	SIZE	
FLOOR TRUSSES	T2R	1	C32T2R - 58'-10"	ST 220L
	T2L	1	C32T2L - 58'-10"	ST 221L
	T2R	1	C32T2R - 58'-10"	
	T22	1	C32T22 - 56'-10"	ST 222
BRIDGING TRUSSES	T7C	1	24T7C - 19'-8"	BT 207C
	T7D	1	24T7D - 19'-8"	BT 207D
	T7E	1	24T7E - 19'-8"	BT 207E
	T14A	1	24T14A - 19'-8"	BT 214A
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 4'-7 15/16"	ST 404
	A12	1	3" x 2" x 1/4" x 3'-11 11/16"	ST 404
	A13	1	3" x 2" x 1/4" x 6'-3 7/16"	ST 404
	A31	1	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
	A35	1	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
	A37	1	3" x 2" x 1/4" x 2'-0"	ST 410
	A38	3	3" x 2" x 1/4" x 8'-4"	ST 410
	A39	1	3" x 2" x 1/4" x 2'-9"	ST 410
	A40	2	3" x 2" x 1/4" x 6'-2"	ST 410
	A41	1	3" x 2" x 1/4" x 2'-10 3/4"	ST 410
	A35	1	3" x 2" x 1/4" x 13'-3"	ST 410
ANGLE ASSEMBLY * (ANGLE ASSEMBLY AA24R IS REPLACED BY AA24RX ON FLOOR 92).	AA21	1	SEE REF. DRWG	ST 411
	AA22	1	SEE REF DRWG	ST 411
	AA23R	1	SEE REF DRWG	ST 411
	AA24R*	1	SEE REF DRWG	ST 412
	AA25R	1	SEE REF. DRWG.	ST 412
	AA26R	1	SEE REF DRWG.	ST 412
	AA9ZR	3	SEE REF. DRWG	ST 404
PATCH PLATES	PP1	6	3" x 1/4" x 0'-9"	ST 400
	PP2	5	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST 303
	K8	1	3 1/2" x 0.135" x 13'-11 1/2"	ST 304
	B	2	9" x 0.135" x 15'-2"	ST 303
	B8	1	3 1/2" x 0.135" x 15'-2"	ST 303
	L8	1	3 1/2" x 0.135" x 15'-2"	ST 304
	E	1	9" x 0.135" x 14'-4 1/2"	ST 303
	E8	1	3 1/2" x 0.135" x 14'-4 1/2"	ST 303
ANGLE CLIPS**	C1	12	3" x 3" x 5/16" x 2'-6"	ST 400
	C2	1	3" x 3" x 5/16" x 2'-5"	ST 400
DIAGONAL FLATS	F	4	11 1/2" x 3/8" x 6'-8"	ST 402
	F2	1	11 1/2" x 3" x 6'-10 1/2"	ST 402
	F2R	1	11 1/2" x 3" x 6'-10 1/2"	ST 402
	F3	1	12" x 3/8" x 6'-11 1/4"	ST 402
	F4	1	11 1/2" x 3/8" x 7'-0"	ST 402
	F5	1	11 1/2" x 3/8" x 4'-4"	ST 402
MISC. PLATES	PF-1	2	11 1/2" x 11 1/2" x 0'-4"	ST 400
	PF 3	5	3 1/2" x 3" x 8" x 0'-5"	ST 400
	PF-7	1	5" x 3/8" x 0'-4"	ST 401
	PF 8	5	3" x 2" x 1/4" x 0'-2 3/8"	ST 401
	PF-10	8	4 1/2" x 1/4" x 0'-2 3/4"	ST 401
	PF 11	1	3" x 1/4" x 0'-2 3/8"	ST 412
EXTENDED END	EX	1	SEE REF DRWG	ST 222
	22			

** NUMBER OF PIECES OF ANGLES MK. C1 & C2 AS SHOWN WILL BE CORRECT AFTER FLOOR 92, TOWER "A"

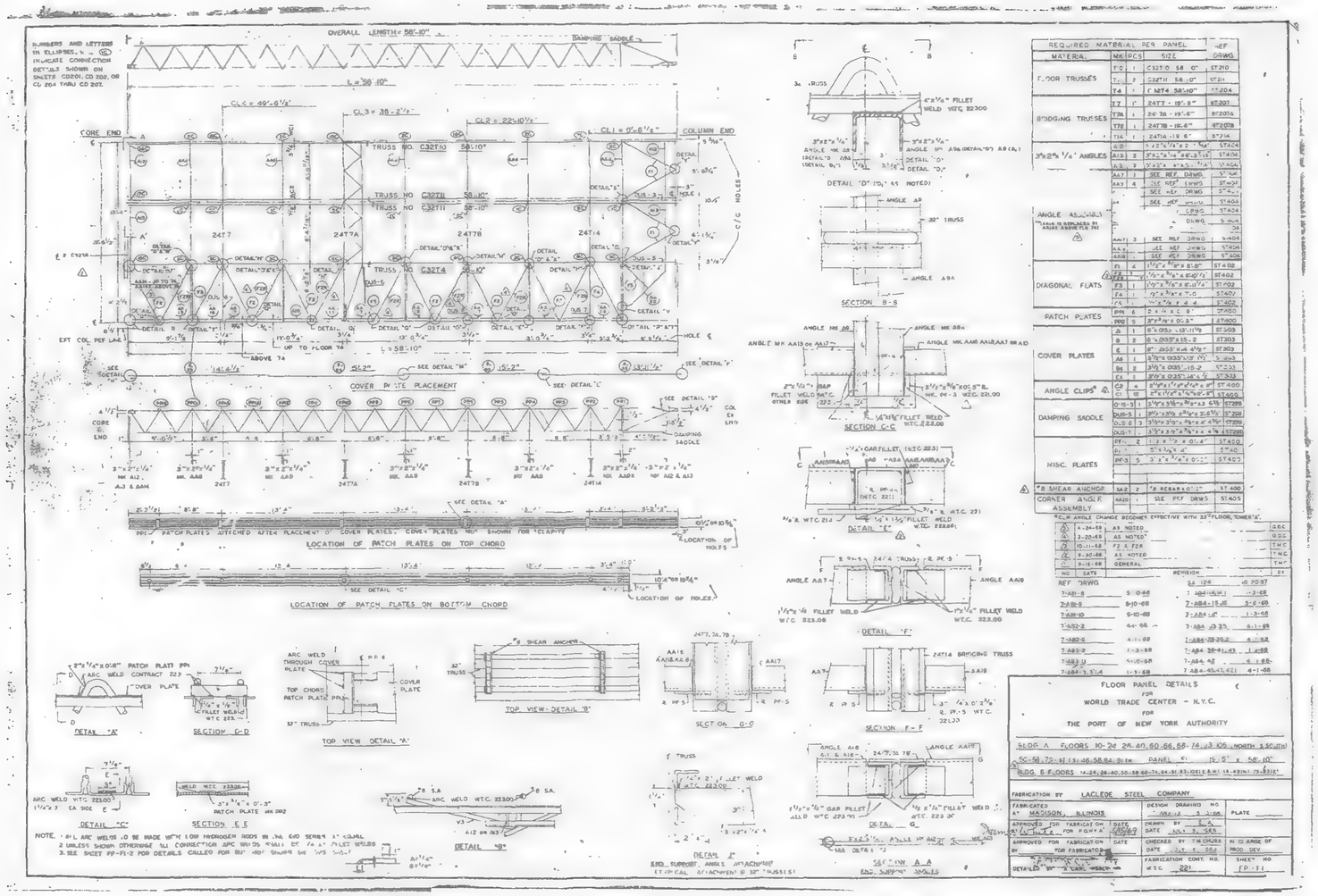
NO.	DATE	REVISION	BY

SEE SHEET FP F2 2 FOR NOTES, REF DRWG & ADDITIONAL DETAILS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A: FLOORS 25, 59 & 92 (NORTH & SOUTH)
PANEL FR2 19'-6" x 58'-10"
BLDG B FLOORS 25, 59 & 92 (EAST & WEST)

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN ASSIGNED TO	PLATE
APPROVED FOR FABRICATION BY P.O.N.Y.A.	DATE 6/26/69	DRAWN BY [illegible] DATE APRIL 7, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY I.M.CHURA DATE APRIL 7, 1969	IN CHARGE OF PROD. DEV.
[illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-FR2



REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T C	1	C32T10 58'-0"	ST 210
	T	2	C32T11 58'-10"	ST 211
	T4	1	C 32T4 58'-10"	ST 204
BRIDGING TRUSSES	T7	1	24T7 - 18'-8"	ST 207
	T7A	1	24 T7A - 19'-6"	ST 207A
	T7B	1	24T7B - 18'-8"	ST 207B
	T14	1	24T14 - 19'-6"	ST 214
3"x2½"x ¼" ANGLES	A10	1	L 2½"x2½"x 2'-10½"	ST 404
	A13	2	3"x2½"x ¼" x 8'-3 15/16"	ST 406
	A12	2	3"x2½"x ¼" x 9'-3 15/16"	ST 406
ANGLE AS SHOWN (ANGLE IS REPLACED BY ANGLE ASSEMBLIES [16])	AA7	1	SEE REF. DRWG.	ST 404
	AA3	4	SEE REF DRWG	ST 404
	AA5	1	SEE REF DRWG	ST 404
	AA6	1	SEE REF DRWG	ST 404
	AA7	3	SEE REF DRWG	ST 404
	AA8	1	SEE REF DRWG	ST 404
	AA9	1	SEE REF DRWG	ST 404
DIAGONAL FLATS	F1	4	1½"x ⅜"x 8'-8 15/16"	ST 402
	F3	1	10"x ⅜"x 8'-11½"	ST 402
	F4	1	10"x ⅜"x 7'-0"	ST 402
	F5	1	10"x ⅜"x 4'-4"	ST 402
PATCH PLATES	PP1	6	2'-1¼" x C. 8"	ST 400
	PP2	2	3"x ⅜" x 0'-3"	ST 400
COVER PLATES	A	1	6"x.053" x 58'-11½"	ST 303
	B	2	6"x.0535"x 58'-2"	ST 303
	E	1	8" .0535"x 46'-4½"	ST 303
	A6	1	3½"x.0535"x 12'-1½"	ST 303
	B6	2	3½"x.0535"x 15'-2"	ST 303
	E6	1	3½"x 0.535"x 46'-4½"	ST 303
ANGLE CLIPS	CB	4	3"x3"x5"x¼"x4'-0"	ST 400
	C1	12	2"x1½"x5"x¼"x0'-8"	ST 400
DAMPING SADDLE	0'-8 1/8"	1	3½"x 3½"x 20"x a.3 6½"	ST 298
	DUS-5	1	3½"x 3½" x 20"x x 2'-6½"	ST 299
	DUS 6	3	3½"x 3½"x 1½"x 6" x 4'-½"	ST 299
	DUS-7	1	3½"x 3½"x 1½"x x 4'-½"	ST 299
MISC. PLATES	PP-1	2	1 x ½" x 0'-4"	ST 400
	P-		5"x½"x 4"	ST 40
	PP-3	5	3" x ½" x 0'-1"	ST 400
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-12"	ST 400
CORNER ANGLE ASSEMBLY	AA20	1	SEE PEF DRWG	ST 405

NO	DATE	REVISION	BY
4	4-24-68	AS NOTED	DEC
3	2-22-68	AS NOTED	DSC
2	10-11-68	F2 & F2R	TWC
1	9-30-68	AS NOTED	TWC
	3-13-68	GENERAL	TWC

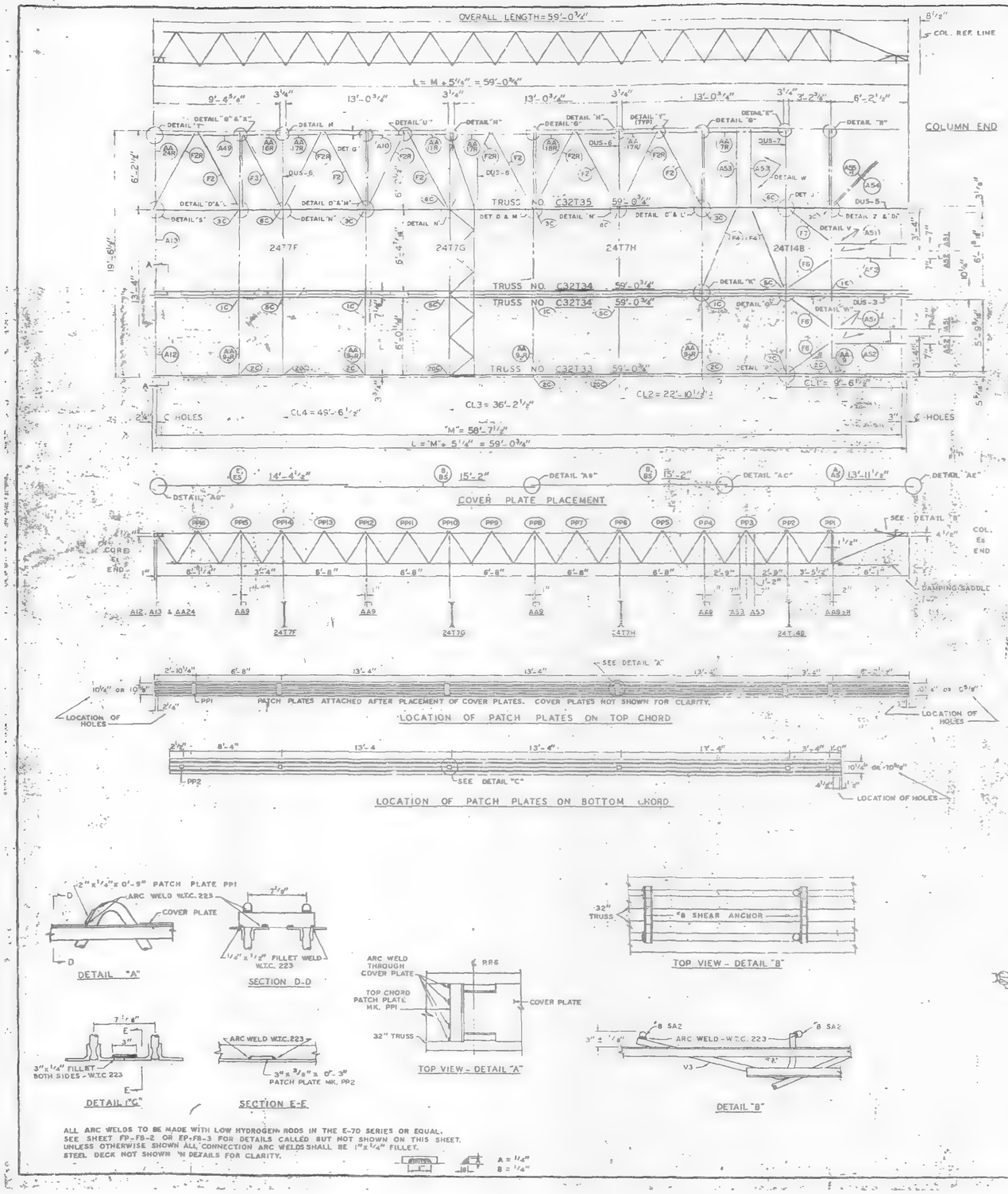
REF DRWG		REVISION	
7-AB1-8	5-10-68	7-AB4-15.30	3-6-68
7-AB1-9	5-10-68	7-AB4-16	1-3-68
7-AB1-10	5-10-68	7-AB4 ø 23	8-1-68
7-AB2-2	4-4-68	7-AB4-28-29.2	4-1-68
7-AB2-6	4-1-68	7-AB4-28-41.43	1-4-68
7-AB3-2	1-3-68	7-AB4-42	4-1-68
7-AB4-3, 3.1, 4	1-3-68	7-AB4-45.47.421	4-1-68

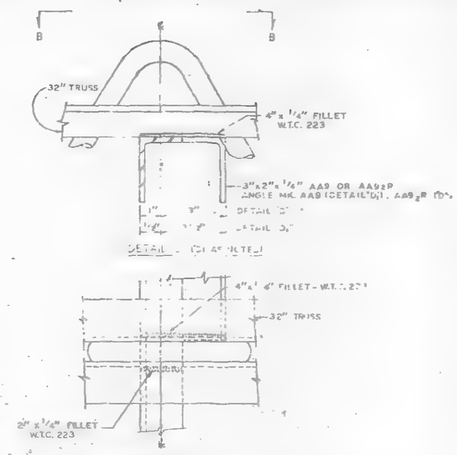
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

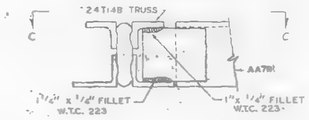
BLDG. A FLOORS 10-26 28, 47, 60-66, 68-74, 83-105 (NORTH SECTION)
5C-58.72-81 (S1-16, 58.84-91) PANEL SIZE 15'-5" x 58'-10"
BLDG. B FLOORS 14-24, 26-40, 50-58 60-74, 84-91, 93-105 (E & W) 14-43 (W) 73-83 (E)

FABRICATION BY LACLEDE STEEL COMPANY

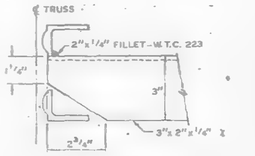
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 385.14 S 2.06	PLATE
APPROVED FOR FABRICATION BY W.T.C. FOR P.O.N.Y.A.	DATE 6/26/69	DRAWN BY D.C. DATE JULY 3, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUKS DATE 7-26-68	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL PEARCE		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-S1







REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
	T35	1	C32T35 x 59'-0 3/4"	ST 235
	T7F	1	24T7F x 19'-6"	BT 207F
BRIDGING TRUSSES	T7G	1	24T7G x 19'-6"	BT 207G
	T7H	1	24T7H x 19'-6"	BT 207H
	T14B	1	24T14B x 19'-6"	BT 214B
	A10	1	3" x 2" x 1/4" x 0'-7 1/2"	ST 404
	A12	1	3" x 2" x 1/4" x 1'-11 1/2"	ST 404
	A13	1	3" x 2" x 1/4" x 0'-11 1/2"	ST 404
	A45	1	3" x 2" x 1/4" x 0'-11"	ST 413
3" x 2" x 1/4" ANGLES	A51	2	3" x 2" x 1/4" x 8'-0"	ST 413
	A52	2	3" x 2" x 1/4" x 8'-0"	ST 413
	A53	1	3" x 2" x 1/4" x 5'-10"	ST 413
	A54	1	3" x 2" x 1/4" x 4'-0 1/2"	ST 413
	A55R	1	3" x 2" x 1/4" x 4'-3"	ST 413
	AA7R	1	SEE REF. DRWG.	ST 406
	AA9	1	SEE REF. DRWG.	ST 404
	AA9zR	4	SEE REF. DRWG.	ST 406
	AA18B	1	SEE REF. DRWG.	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
ANGLE ASSEMBLY	AA17R	3	SEE REF. DRWG.	ST 406
	AA18G	1	SEE REF. DRWG.	ST 406
	AA24R	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	6	1" x 5 3/8" x 6'-10 1/2"	ST 402
	F2R	6	1" x 5 3/8" x 6'-10 1/2"	ST 402
	F3	1	1" x 5 3/8" x 6'-11 1/4"	ST 402
	F4	2	1" x 5 3/8" x 7'-0"	ST 402
	F6	3	1" x 5 3/8" x 4'-7"	ST 415
	F7	1	1" x 5 3/8" x 4'-8 3/4"	ST 415
PATCH PLATES	PP1	6	1/2" x 12" x 0'-3"	ST 400
	PP2	6	1/2" x 3 1/2" x 0'-3"	ST 400
COVER PLATES	A	1	6" x .0135" x 13'-11 1/2"	ST 303
	B	2	9" x .0135" x 14'-4 1/2"	ST 303
	E	1	9" x .0135" x 15'-2"	ST 303
	As	1	3 1/2" x .0135" x 13'-11 1/2"	ST 303
	Bs	2	3 1/2" x .0135" x 15'-2"	ST 303
	Es	1	3 1/2" x .0135" x 14'-8 1/2"	ST 303
ANGLE CLIPS	C1	9	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	7	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C5	1	3" x 2" x .37" x 0'-3"	ST 418
DAMPING SADDLE	DUS-3	1	3 1/2" x 1 1/2" x 3/16" x 3'-6 3/4"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 3/4"	ST 298
	DUS-6	3	3 1/2" x 3 1/2" x 3/16" x 4'-4 3/4"	ST 1250
	DUS-7	1	3 1/2" x 3 1/2" x 3/16" x 4'-4 3/4"	ST 298
MISC. PLATES	PF-1	2	1 1/2" x 1 1/2" x 0'-4"	ST 400
	PF-3	5	3 1/2" x 3 1/2" x 0'-5"	ST 400
	PF-12	2	6 1/2" x 1 1/2" x 1'-0"	ST 418
	PF-13	2	1" x 1 1/2" x 1'-6"	ST 418
	PF-14	2	3" x 1 1/4" x 0'-7"	ST 415
	PF-15	2	1 1/2" x 1 1/2" x 0'-2"	ST 416
	PF-16	2	8 1/4" x 1 1/2" x 0'-2"	ST 416
	PF-17	2	2" x 1/4" x 3 1/2"	ST 416
	PF-18	3	2" x 1/4" x 1'-1 7/8"	ST 416
7/8" SHEAR ANCHOR	SA2	2	7/8" REBAR x 0'-9"	ST 400



ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-FB-2 OR FP-FB-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FILLET.
STEEL DECK NOT SHOWN IN DETAILS FOR CLARITY.

A = 1/4"
B = 1/4"

SKILLING - HELLE CHRISTIANSEN - ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
NOT APPROVED
DATE 7/11/69

CENTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, ie. (1-C)

NO	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

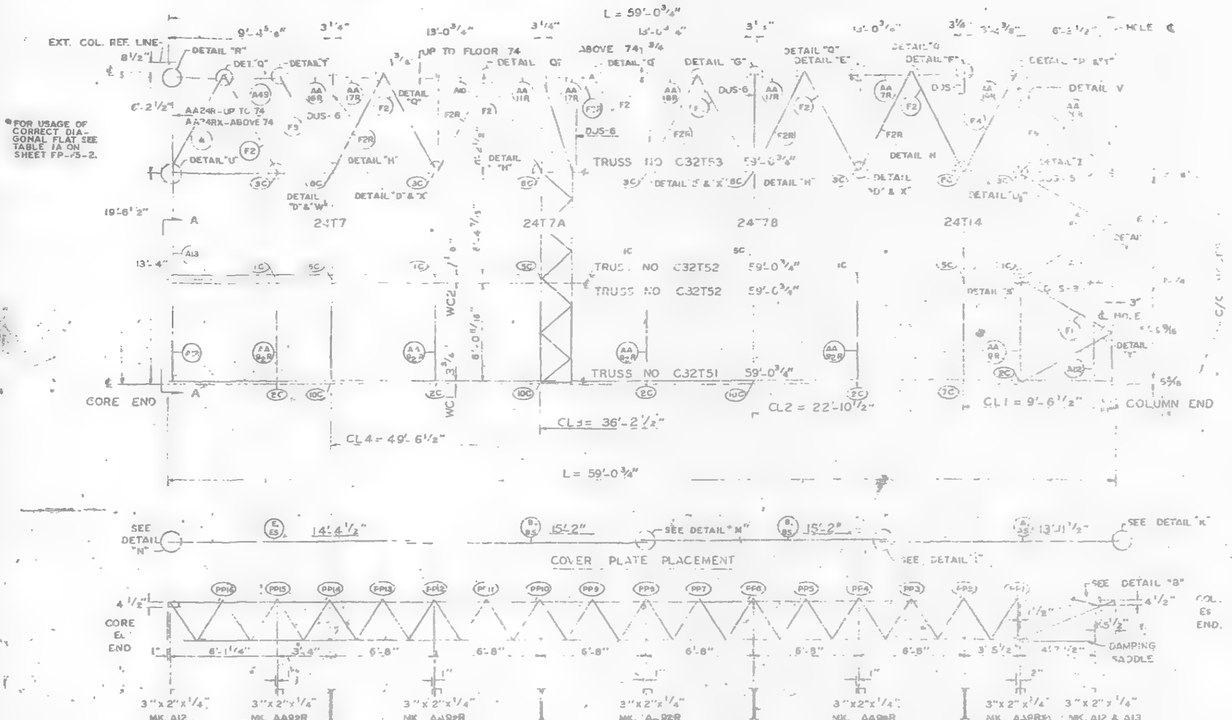
BLDG A (LEVELS 44 (SOUTH))

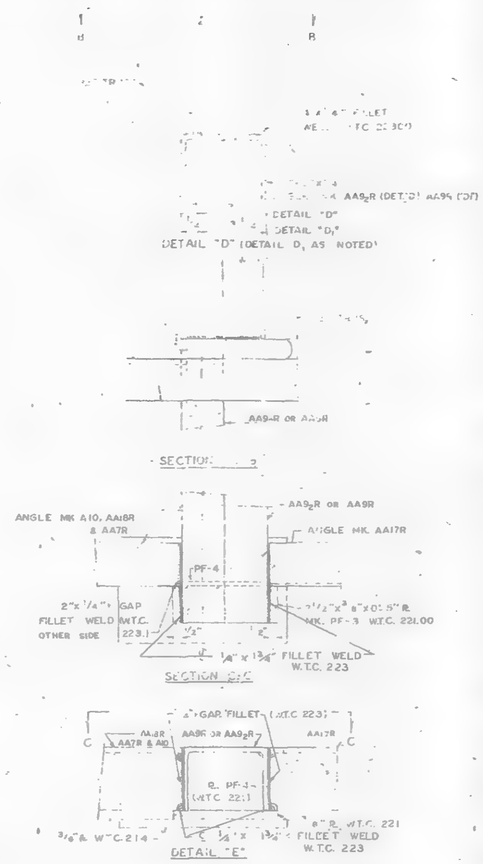
PANEL FRB 19'-6" x 59'-0 3/4"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-63	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY gdc DATE APR. 7, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APR. 7, 1969	IN CHARGE OF PROJ. DEV.
DETAILED BY LACLEDE STEEL CO. CHARLES WEBER		FABRICATION CONT. NO. W.T.C 221	SHEET NO. FP-FR8

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. -1C-, SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.





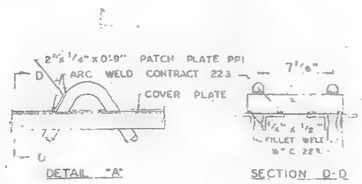
MARK	QTY	SIZE	REF DRWG
T51		C32T51 - 59'-0 3/4"	ST 251
T52		C32T52 - 59'-0 3/4"	ST 252
T53		C32T53 - 59'-0 3/4"	ST 253
[illegible]		24T7 [illegible]	ST 40[illegible]
[illegible]		24T7A [illegible]	ST 40[illegible]
[illegible]		24T8 [illegible]	ST 40[illegible]
[illegible]		24T14 [illegible]	ST 40[illegible]
[illegible]		[illegible]	[illegible]
A49	1	3"x3"x1/4"x5'-0"	ST 413
AA17R		SEE REF. DRWG.	ST 406
AA18R		SEE REF. DRWG.	ST 406
AA9ZR	4	SEE REF. DRWG.	ST 406
AA17R		SEE REF. DRWG.	ST 406
AA18R		SEE REF. DRWG.	ST 406
AA17R	3	SEE REF. DRWG.	ST 406
AA18R	1	SEE REF. DRWG.	ST 400
AA19R	1	SEE REF. DRWG.	ST 400
AA24R	1	SEE REF. DRWG.	ST 412
FI	4	1'-4"x 5/8"x 1'-8"	ST 402
PF-5	7	1'-2"x 5/8"x 6'-0 1/2"	ST 402
PF-3	1	1'-2"x 5/8"x 6'-11 1/2"	ST 402
184	1	1'-2"x 5/8"x 7'-0"	ST 402
185	1	1'-2"x 5/8"x 6'-4"	ST 402
PP1	6	2"x1/4"x 0'-9"	ST 400
PP2	8	3"x3/8"x 6'-3"	ST 400
A	1	9"x.0135"x[illegible]	ST 303
B	2	9"x.0135"x15'-4"	ST 303
E	1	9"x.0135"x14'-4 1/2"	ST 303
C	1	8 1/2"x.0135"x13'-11 1/2"	ST 303
BC	2	3 1/2"x.0135"x1[illegible]	ST 303
EF	1	3 1/4"x.0135"x14'-4"	ST 303
C2	4	2"x4"x1/4"x1'-6"	ST 400
C1	12	2"x1 1/2"x1/4"x 0'-6"	ST 400
[illegible]	[illegible]	[illegible]	ST 299
[illegible]	[illegible]	[illegible]	ST 299
[illegible]	[illegible]	[illegible]	ST 299
[illegible]	[illegible]	[illegible]	ST 299
FBAR	*	SEE REF. DRWG.	ST 415
C5	1	3"x2"x.37"x 0'-3"	ST 413
SA2	2	8 REBAR x 0'-9"	ST 400
AA2RR	1	SEE REF. DRWG.	ST 405

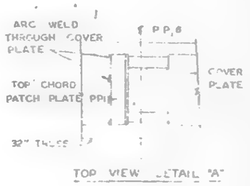
**AA24R IS REPLACED BY AA24RX ABOVE FLOOR 74

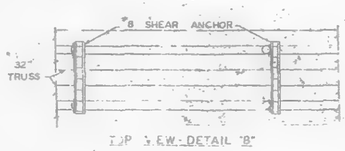
NO	DATE	REVISION	BY

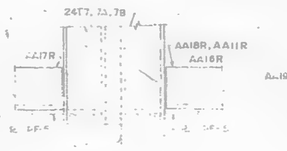
REF. DRWG.

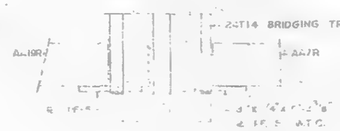
7-A6	11-25-68	SA-124	1-6-69
7-A6,46	11-25-68	7-AB4-14,14.1	10-15-68
7-A8,47	11-25-68	7-AB4-15,16	7-22-68
7-A9,48	11-25-68	7-AB4-21	7-22-68
7-A92	7-22-68	7-AB4-23-25	7-22-68
7-AB[illegible]	7-22-68	7-AB4-29	1-3-68
7-AB[illegible]70	11-25-68	7-AB4-39-41,43	7-22-68
7-AB3-76	11-25-68	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-44	12-20-68

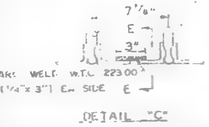


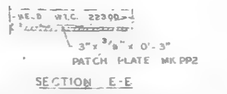












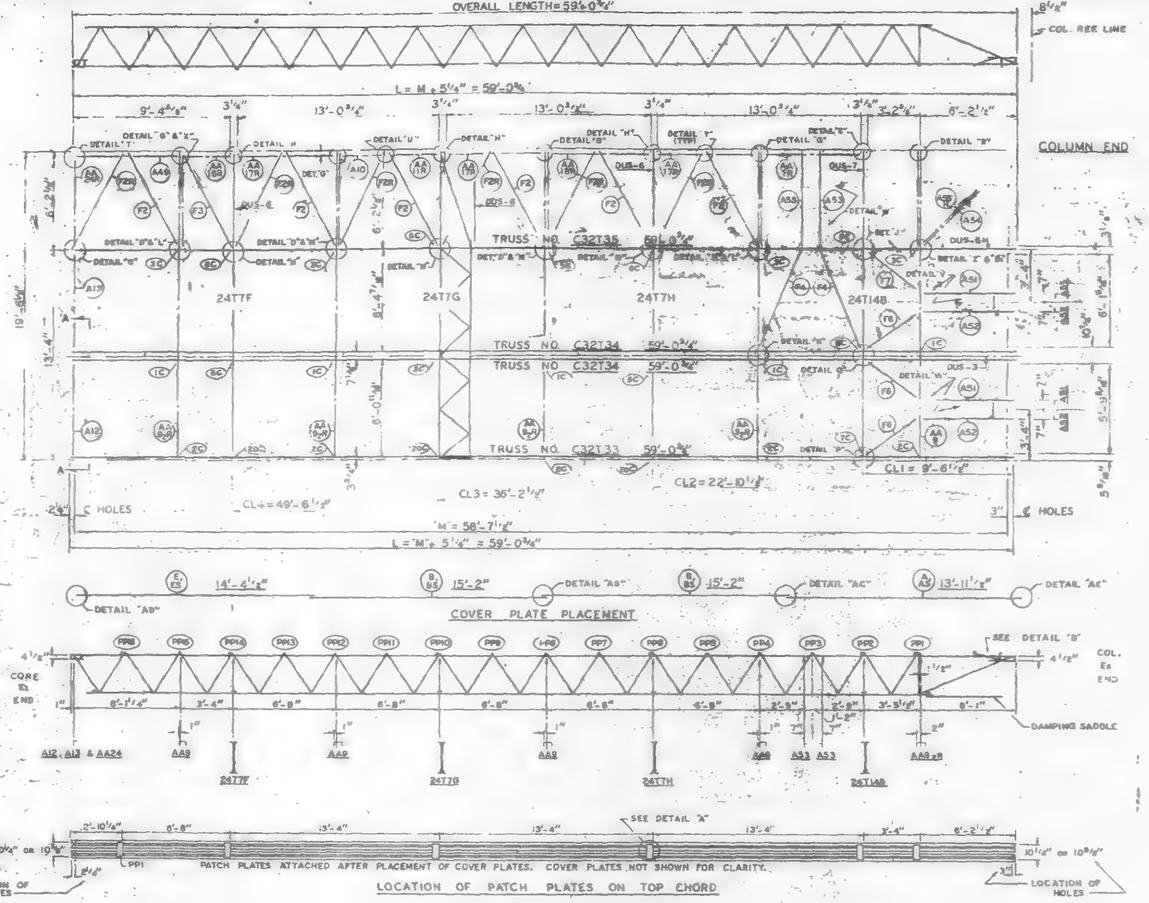
NOTE.
1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 4"x" FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET

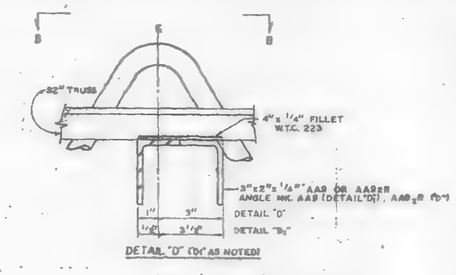
FABRICATION DETAILS
FOR
WORLD TRADE CENTER - PHASE I
FOR
THE PORT OF NEW YORK AUTHORITY

79 (NORTH & SOUTH) 45-49 (SOUTH ONLY)
80-83 (NORTH ONLY) FR5 [illegible]'-6" x 59'-0 3/4"
BLDG. B FLOORS 79 (EAST & WEST) 45-49 (EAST ONLY) 80-83 (WEST ONLY)

FABRICATION BY LACLEDE STEEL COMPANY

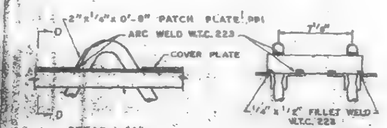
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-76	PLATE
APPROVED FOR FABRICATION BY PORT AUTHORITY DATE	DRAWN BY DATE APRIL 9, 1969	
APPROVED FOR FABRICATION BY SOR FABRICATOR DATE	CHECKED BY T. TSUMURA DATE APRIL 9, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARLSTEEP	FABRICATION CONT. NO. WTC 221	SHEET NO. FP-FR5

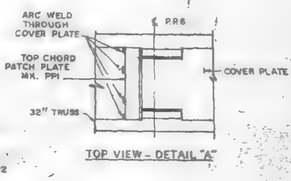


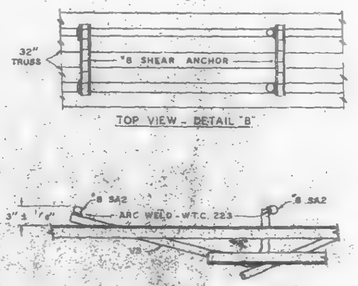


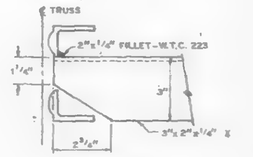
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T33	1	C32T33 x 59'-0 3/4"	ST 233
	T34	2	C32T34 x 59'-0 3/4"	ST 234
△	T35	1	C32T35 x 59'-0 3/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-8"	BT 207F
	T7G	1	24T7G x 19'-8"	BT 207G
	T7H	1	24T7H x 19'-8"	BT 207H
	T14B	1	24T14B x 19'-8"	BT 214B
3"x2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4" x 2'-7" 5/8"	ST 404
	A12	1	3"x 2"x 1/4" x 5'-11 1/16"	ST 404
	A13	1	3"x 2"x 1/4" x 6'-3 7/16"	ST 404
	A49	1	3"x 2" x 1/4" x 6'-0 11/16"	ST 413
	A51	2	3"x 2" x 1/4" x 8'-0"	ST 413
	A52	2	3"x 2" x 1/4" x 6'-6"	ST 413
	A53	2	3"x 2" x 1/4" x 5'-10"	ST 413
	A54	1	3"x 2" x 1/4" x 4'-0 1/2"	ST 413
	A55R	1	3"x 2" x 1/4" x 4'-3"	ST 4.3
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG	ST 406
	AA9	1	SEE REF. DRWG	ST 404
	AA9sR	4	SEE REF. DRWG	ST 406
	AA11R	1	SEE REF. DRWG.	ST 406
	AA16R	1	SEE REF. DRWG.	ST 406
	AA7R	3	SEE REF. DRWG	ST 406
	AA18R	1	SEE REF. DRWG.	ST 406
	AA24R	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	6	1" x 5/8" x 6'-10 1/2"	ST 402
	F2R	6	1" x 5/8" x 6'-10 1/2"	ST 402
	F3	1	1" x 5/8" x 6'-11 1/2"	ST 402
	F4	2	1" x 5/8" x 7'-0"	ST 402
	F8	3	1" x 5/8" x 4'-7"	ST 415
	F7	1	1" x 5/8" x 4'-9 3/16"	ST 415
PATCH PLATES	PP1	6	2" x 1/4" x 0'-8"	ST 400
	PP2	6	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	1	9" x .0135" x 13'-11"	ST 303
	B	2	9" x .0135" x 15'-2"	ST 303
	E	1	9" x .0135" x 14'-4 1/2"	ST 303
	A5		3 1/2" x .0135" x 13'-11 1/2"	ST 303
	B8	2	3 1/2" x .0135" x 15'-2"	ST 303
	E8	1	3 1/2" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	9	2" x 1" x 1/4" x 0'-6"	ST 400
	C2	7	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C5	1	3" x 2" x .37" x 0'-3"	ST 418
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 5/8"	ST 298
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 5/8"	ST 299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 3/8"	ST 1299
	DUS-7	1	3 1/2" x 3'-3" x 3/8" x 4'-4 3/8"	ST 299
MISC. PLATES	PF-1	2	1" x 1" x 1/2" x 0'-4"	ST 400
	PF-3	5	3 1/2" x 3/8" x 0'-5"	ST 400
	PF-12	2	6" x 1/2" x 1'-0"	ST 416
	PF-13	2	1" x 1/4" x 1'-0"	ST 416
	PF-14	2	3" x 1" x 1/4" x 0'-7"	ST 416
	PF-15	2	1" x 1" x 1/2" x 0'-2"	ST 416
	PF-16	2	8" x 2" x 0'-2"	ST 416
	PF-17	2	2" x 1" x 3/16"	ST 416
	PF-18	3	2" x 1" x 1'-1"	ST 416
3/8 SHEAR ANCHOR	SA2	2	3/8 REBAR x 0'-8"	ST 400

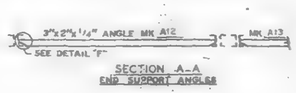
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229.











ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-PB OR FP-FB-3 FOR DETAILS CALLED BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 3/16" x 1/4" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

A = 1/16"
B = 1/16"

NO.	DATE	REVISION	CHK BY
1	8-4-68	AS NOTED	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A (FLOORS 44 (SOUTH))

PANEL FR8 19'-6" x 59'-0 3/4"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-63	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 4/11/69	DRAWN BY gdc DATE APR. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APR. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR8

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6"x2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

DETAIL "N" (OPP HAND FOR FR PANEL)

DETAIL "X" (OPP HAND FOR FR PANEL)

DETAIL "Z" (OPP HAND FOR FR PANEL)

DETAIL "Y"

DETAIL "S"

DETAIL "T"

DETAIL "U"

DETAIL "O"

DETAIL "R"

DETAIL "V"

DETAIL "W"

SECTION H-H (OPP HAND FOR FR PANEL)

DETAIL "P" (OPP HAND FOR FR PANEL)

DETAIL "Q"

SECTION J-J

DETAIL "M"

DETAIL "L"

COVER PLATES .29 GA. THICK

DETAIL "N"

DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (FI) AND AA20R (FR) - OPP HAND

SECTION K-K

SECTION L-L

NOTE
1. DIMENSION IS 10'-6" UP TO & INCL FLOOR 74 AND 15'-6" ABOVE FLOOR 74

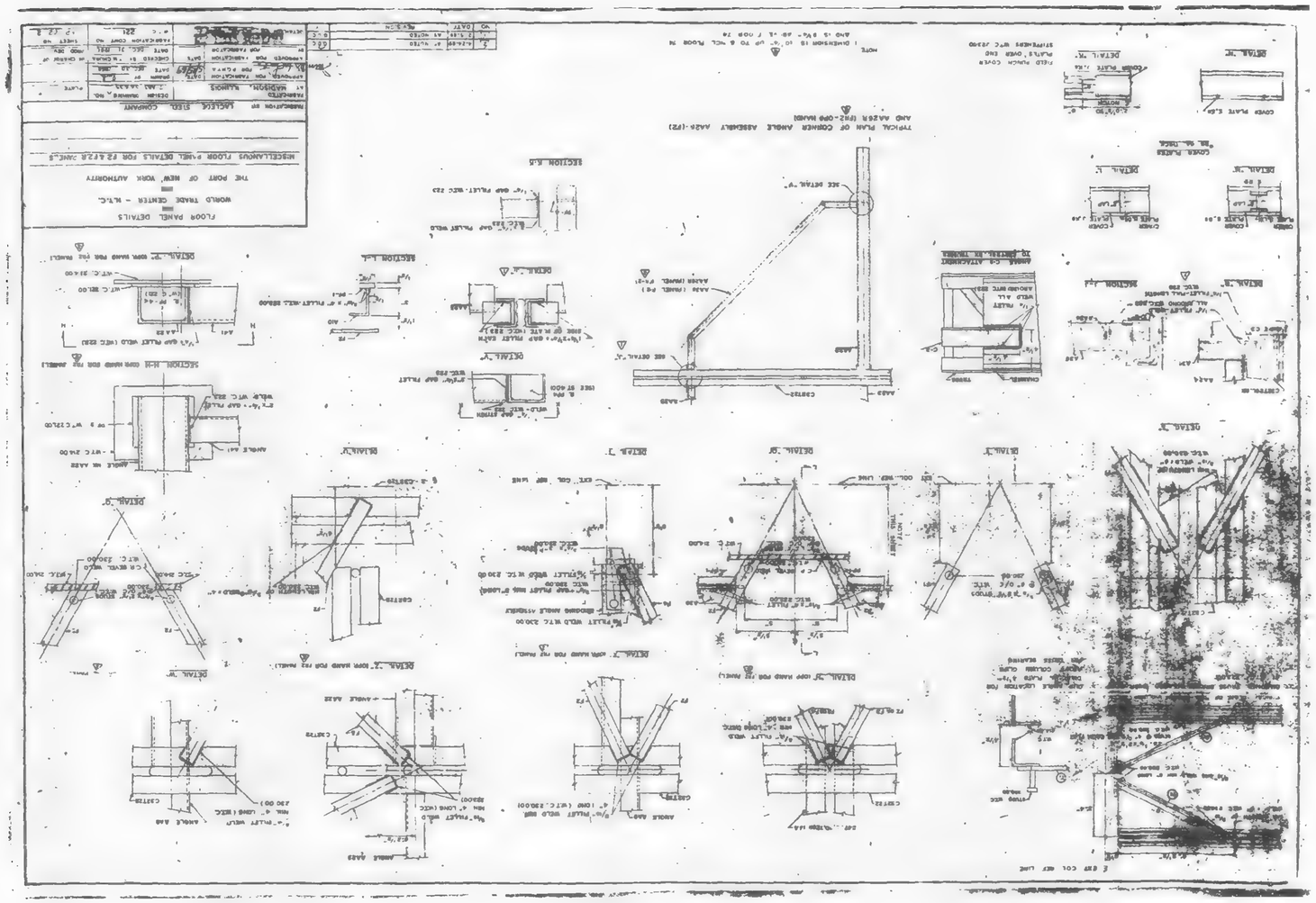
NO	DATE	REVISION	BY
4	4-26-68	AS NOTED	BDC
3	3-20-68	AS NOTED	BDC
2	2-20-68	AS NOTED	" "
1	4-20-66	GENERAL	TMC

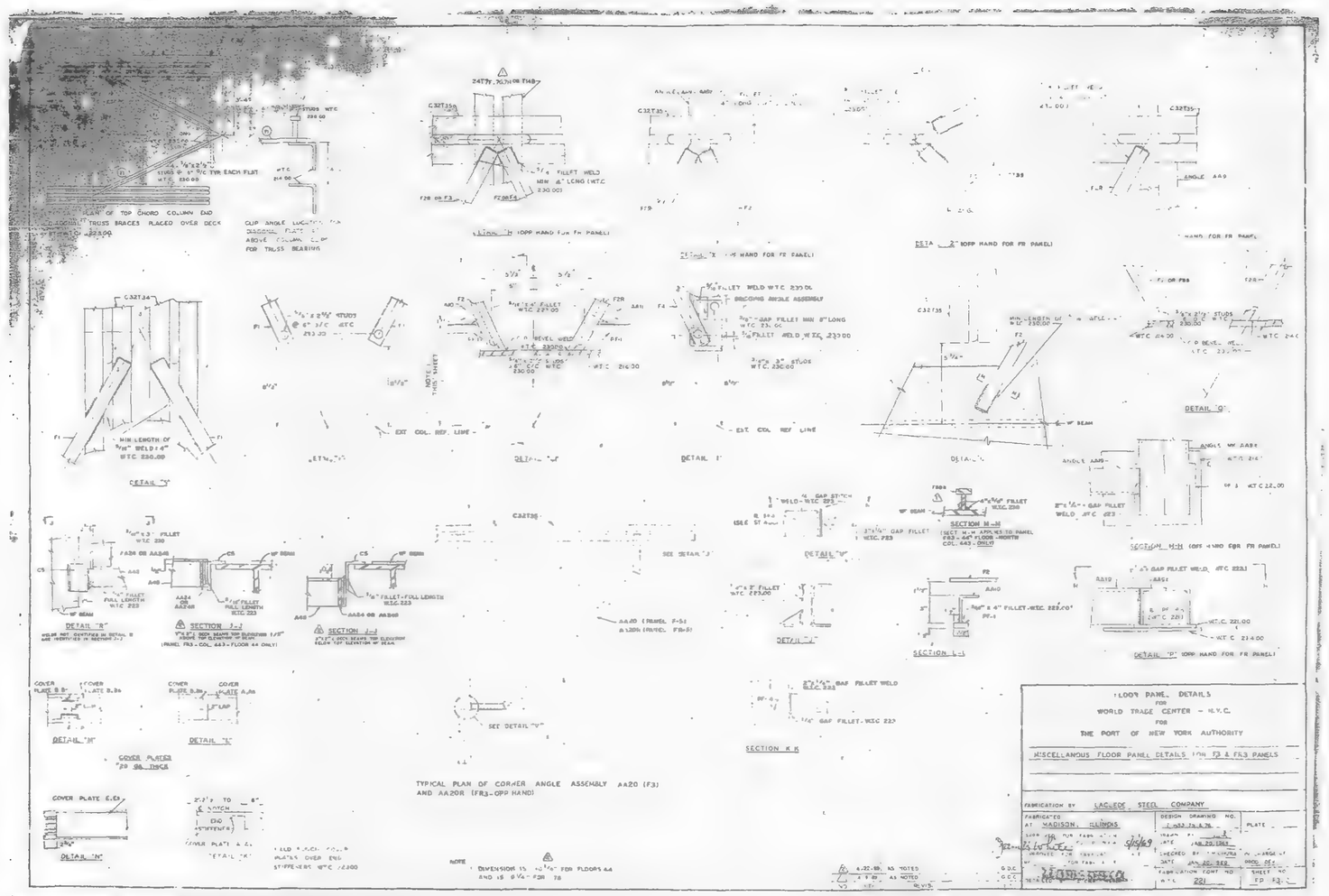
FLOOR PANEL - DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

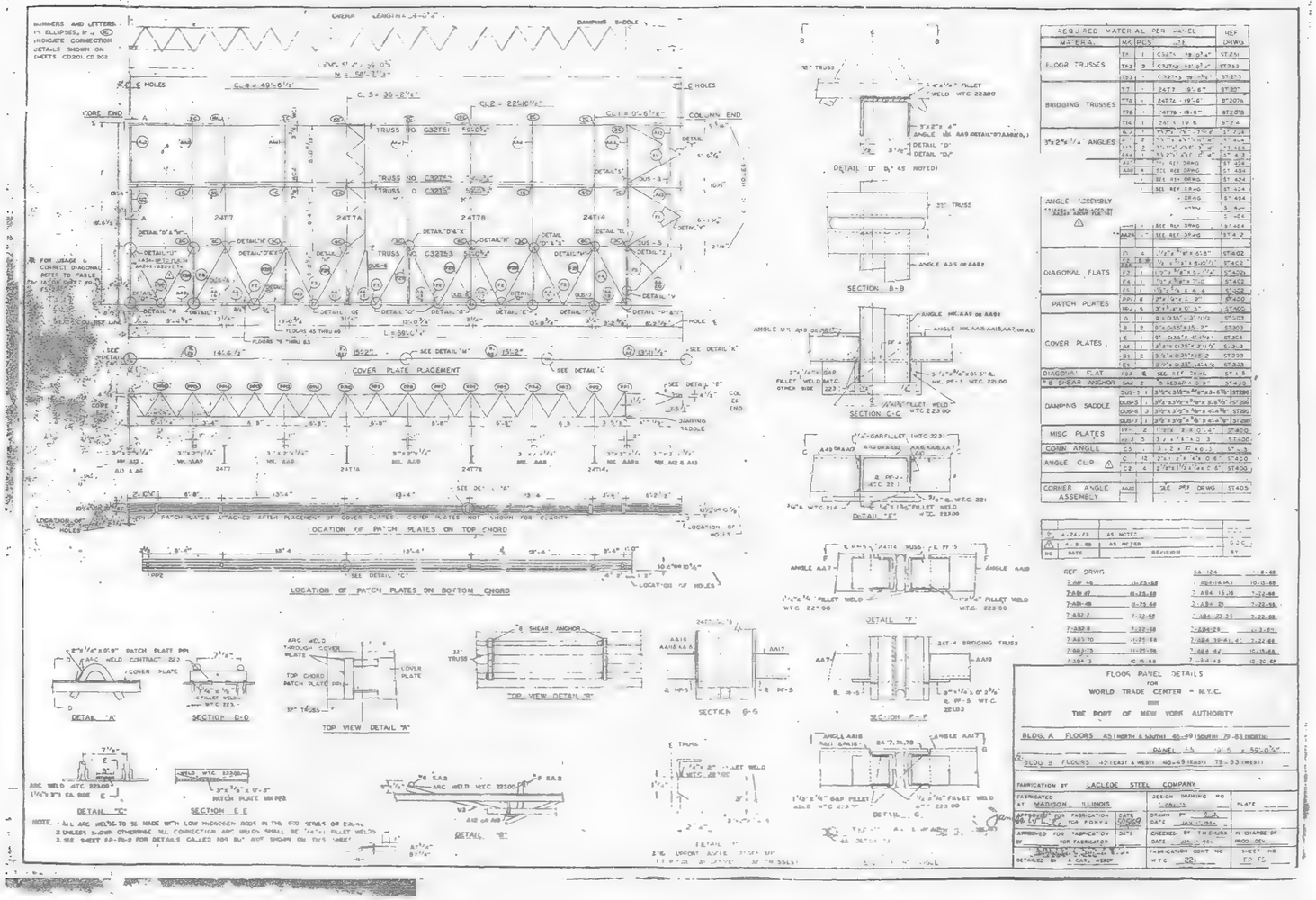
MISCELLANOUS FLOOR PANEL DETAILS FOR FI & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY
ERECTION BY: WASHINGTON STEEL WORKS

APPROVED FOR FABRICATION BY	DATE	DESIGN DRAWING NO. 7-A61-3 S.O. 88	PLATE
APPROVED FOR FABRICATION BY	DATE	DRAWN BY [illegible] DATE JULY 15, 1968	
		CHECKED BY T.N. CHUMA DATE JULY 15, 1968	IN CHARGE OF APPD DEV
		FABRICATION CONT NO WTC 221	SHEET NO 1 OF 2




DETAIL "A"
DETAIL "B"
SECTION 2-2
SECTION 1-1
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "H"
DETAIL "I"
DETAIL "J"
DETAIL "K"
SECTION H-H
SECTION K-K
SECTION L-L
SECTION M-M
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F3) AND AA20R (FR3-OPP HAND)
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
MISCELLANOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. L-852-75-A-76
PLATE
DATE JAN 20 1969
CHECKED BY
DATE JAN 20 1969
PROJ. DE
SHEET NO. 221
FD F3-



REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T1	1	C32T1 49'-0 1/4"	ST-701
	T32	2	C32T32 48'-0 1/4"	ST-702
	T33	1	C32T33 38'-0 3/4"	ST-703
BRIDGING TRUSSES	T7	1	24T7 19'-6"	ST-707
	T7A	1	24T7A 19'-6"	ST-707A
	T7B	1	24T7B 19'-6"	ST-707B
	T14	1	24T4 19'-6	ST-714
3"x2½"x1/4" ANGLES	A1	1	11'-7" @ 7.70 lbs/ft	ST-701
	A7	2	7'-1" @ 4.91 lbs/ft	ST-701
	A11	2	7'-1" @ 4.91 lbs/ft	ST-701
	A14	1	7'-2" @ 4.91 lbs/ft	ST-701
	A17	4	SEE REF DRWG	ST-701
	A18	4	SEE REF DRWG	ST-701
	A19	4	SEE REF DRWG	ST-701
	A20	4	SEE REF DRWG	ST-701
ANGLE ASSEMBLY			SEE REF DRWG	ST-701
			SEE REF DRWG	ST-701
	A1	4	SEE REF DRWG	ST-701
	A4	4	SEE REF DRWG	ST-701
DIAGONAL FLATS	D1	4	1'-2" x 3" x 5/16"	ST-702
	D2 & D3	2	1'-2" x 3" x 5/16"	ST-702
	D2A	1	1'-2" x 3" x 5/16"	ST-702
	F3	1	1'-2" x 3" x 5/16"	ST-702
	F4	1	1'-2" x 3" x 5/16"	ST-702
	F5	1	1'-2" x 3" x 5/16"	ST-702
PATCH PLATES	PP1	8	2'-2" x 1'-6" x 3/8"	ST-700
COVER PLATES	P1	5	3'-1" x 1'-0" x 3/8"	ST-700
	P1	1	2'-0 0.375" x 1'-1 1/2"	ST-703
	P1	2	2'-0 0.375" x 1'-1 1/2"	ST-703
	P1	1	6" x 0.375" x 1'-4 1/2"	ST-703
	P1	1	2'-2" x 0.375" x 1'-1 1/2"	ST-703
	P1	2	3'-1" x 0.375" x 1'-0"	ST-703
	P1	1	3'-0" x 0.375" x 1'-0"	ST-703
DIAGONAL FLAT	F2A	1	SEE REF DRWG	ST-4.5
"B" SHEAR ANCHOR	SA2	2	B SHEAR ANCHOR	ST-4.20
DAMPING SADDLE	DUS-1	1	3'-9" x 3'-9" x 3/8" x 3.6 lbs	ST-7286
	DUS-5	1	3'-9" x 3'-9" x 3/8" x 3.6 lbs	ST-7286
	DUS-6	3	3'-10" x 3'-10" x 7/16" x 10.4 lbs	ST-7290
	DUS-7	1	3'-9" x 3'-9" x 7/16" x 10.4 lbs	ST-7289
MISC PLATES	PP1-2	2	1'-7 3/8" x 8" x 0'-1.4"	ST-7400
	W2	5	3" x 3" x 1/2"	ST-7400
CONN. ANGLE	C5	1	3" x 2" x 5" x 0'-3"	ST-7400
ANGLE CLIP	C1	12	2" x 1 1/2" x 4" x 0'-6"	ST-7400
	C2	4	2" x 1 1/2" x 4" x 0'-6"	ST-7400
CORNER ANGLE ASSEMBLY	AA20		SEE REF DRWG	ST-7405

NO	DATE	AS NOTED	BY
1	4-24-68	AS NOTED	D.D.C.
2	A.B.-68	AS NOTED	

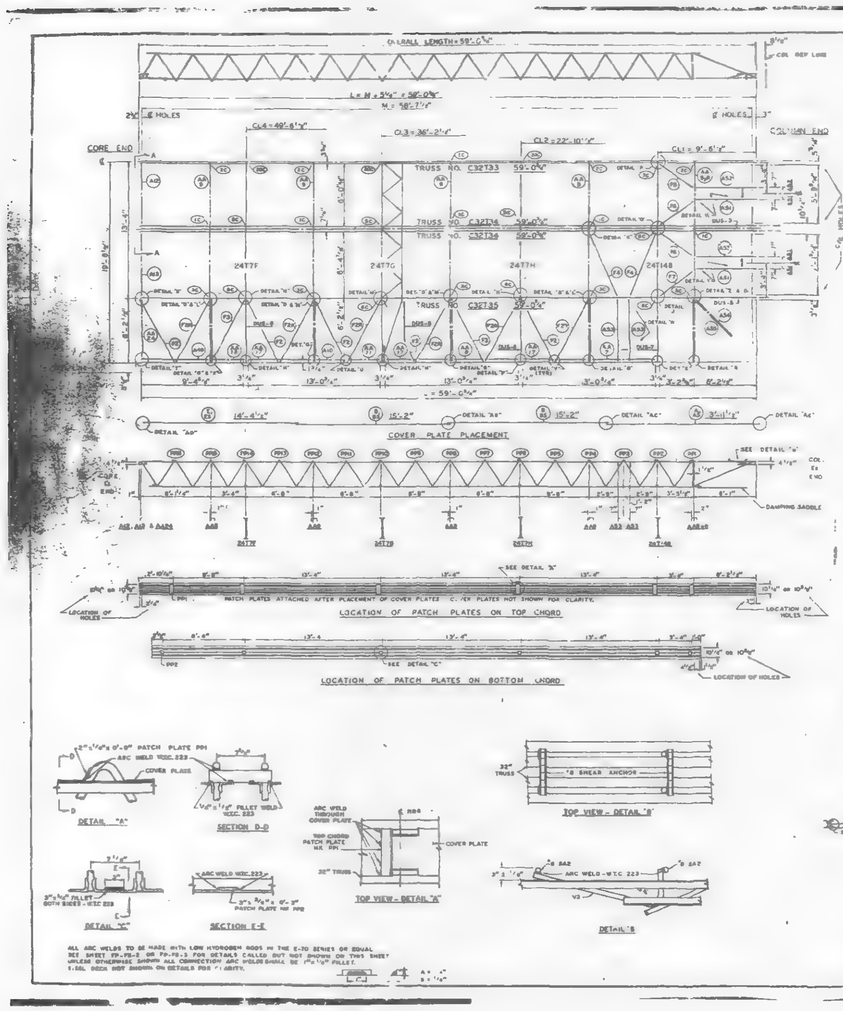
REF DRWG

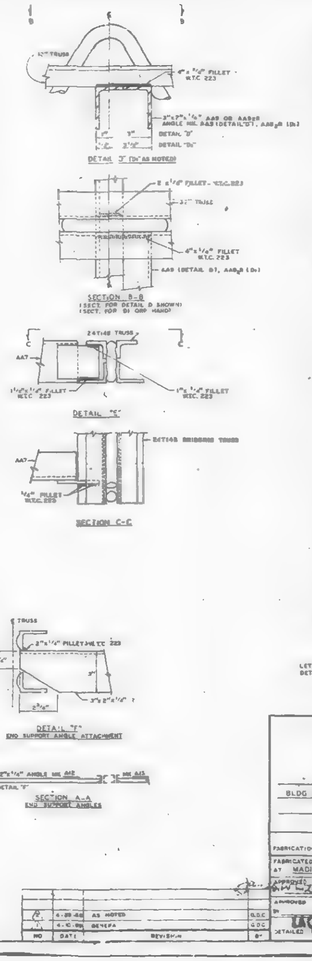
7-AA1-46	11-23-68	7-AB4-14 & 15	10-10-68
7-AB1-47	11-23-68	7-AB4-15,16	7-22-68
7-AB1-48	11-25-68	7-AB4-21	7-22-68
7-AB2-2	7-22-68	7-AB4-22.5	7-22-68
7-AB2-9	7-22-68	7-AB4-29	10-3-68
7-AB3-70	11-25-68	7-AB4-39-41, 43	7-22-68
7-AB3-73	11-25-68	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-43	10-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46-69 (SOUTH) 79-83 (NORTH)
PANEL L5 - 0'-0 x 59'-0 3/4"
BLDG B FLOORS 45 (EAST & WEST) 46-69 (EAST) 79-83 (WEST)

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	PLATE
APPROVED FOR FABRICATION BY	DATE	DRAWN BY	
APPROVED FOR FABRICATION BY	DATE	CHECKED BY	IN CHARGE OF
DETAILED BY		FABRICATION CONT NO WTC 221	SHEET NO FP-F2





REQUIRED MATERIAL PER PANEL				REF. DWG
MATERIAL	MK	PCS.	SIZE	
LOOR TRUSSES	T33	1	C32733 x 59'-0 1/4"	ST 233
	T34	2	C32734 x 59'-0 1/4"	ST 234
	T35	1	C32735 x 59'-0 1/4"	ST 235
BRIDGING TRUSSES	T7F	1	24T7F x 19'-8"	ST 207F
	T7G	1	24T7G x 19'-8"	ST 207G
	T7H	1	24T7H x 19'-8"	ST 207H
	T48	1	24T48 x 19'-8"	ST 2148
"x "x 1/4" ANGLES	A01	1	3"x2"x1/4"x 23'-11"	ST 401
	A02	1	3"x2"x1/4"x 21'-11"	ST 402
	A03	1	3"x2"x1/4"x 18'-5"	ST 403
	A04	1	3"x2"x1/4"x 16'-5"	ST 413
	A51	2	3"x2"x1/4"x 8'-0"	ST 414
	A52	1	3"x2"x 1/4"x 6'-6"	ST 413
	A53	2	3"x2"x 1/4"x 5'-0"	ST 413
	A54	1	3"x2"x 1/4"x 4'-0"	ST 413
		1	3"x2"x 1/4"x 1'-3"	ST 413
		2	3"x2"x 1/4"x 0'-7"	ST 407
ANGLE ASSEMBLY	AA1	4	SEE REF DRWG	ST 404
	AA1A	1	SEE REF DRWG	ST 404
	AA1B	1	SEE REF DRWG.	ST 404
	AA1C	1	SEE REF DRWG	ST 404
	AA1D	3	SEE REF DRWG	ST 404
	AA1E	1	SEE REF DRWG	ST 404
	AA1H	1	SEE REF. DRWG.	ST 413
DIAGONAL FLATS	F2	6	1'-3" x 3/16" x 8'-10 1/2"	ST 402
	F2A	8	1'-3" x 3/16" x 8'-10 1/2"	ST 402
	F3	1	1'-3" x 3/16" x 8'-11 1/2"	ST 402
	F4	2	1'-3" x 3/16" x 7'-0"	ST 402
	F5	3	1'-3" x 3/16" x 6'-7"	ST 413
	F7	1	1'-3" x 3/16" x 5'-8 3/4"	ST 413
PATCH PLATES	PP1	8	3" x 1'-4" x 0'-8"	ST 400
	PP2	8	3" x 2'-8" x 0'-8"	ST 400
COVER PLATES	A	1	9" x .0135" x 13'-11 1/2"	ST 303
	B	2	9" x .0135" x 13'-2"	ST 303
	E	1	9" x .0498" x 59'-0 1/4"	ST 398
	A6	1	3" x .0135" x 13'-11 1/2"	ST 303
	B4	2	3" x .0135" x 13'-2"	ST 383
	E6	1	3" x .0138" x 59'-0 1/4"	ST 383
ANGLE CLIPS	C1	12	3" x 1" x 0" x 1" x 0'-6"	ST 400
	C2	4	3" x 1" x 0" x 1" x 0'-6"	ST 400
	C3	1	3" x 2" x .277" x 0'-8"	ST 418
DAMPING SADDLE	DMS-1	1	3" x 3" x 3" x 1'-2 1/2"	ST 398
	DMS-2	1	3" x 3" x 3" x 1'-2 1/2"	ST 398
	DMS-3	1	3" x 3" x 3" x 1'-2 1/2"	ST 398
	DMS-4	3	3" x 3" x 3" x 1'-2 1/2"	ST 398
	DMS-7	1	3" x 3" x 3" x 1'-2 1/2"	ST 398
MISC. PLATES	MP-1	2	1" x 6" x 1" x 0'-6"	ST 400
	MP-3	5	3" x 3" x 3" x 0'-8"	ST 400
	MP-12	2	8" x 3" x 1" x 1'-0"	ST 416
	MP-13	2	7" x 1" x 1" x 1'-0"	ST 416
	MP-14	1	3" x 1" x 1" x 0'-7"	ST 416
	MP-15	2	1" x 6" x 1" x 1'-0"	ST 416
	MP-16	2	8" x 4" x 1" x 0'-3"	ST 416
	MP-17	2	8" x 1" x 3" x 1'-6"	ST 416
	MP-18	3	2" x 1" x 1" x 1'-7 1/2"	ST 416
"B SHEAR ANCHORS	SA-2	2	"B SHEAR x 0'-8"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 220, ETC.

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)

PANEL FB 19'-8" x 59'-0 1/4"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A82-82

PLATE 9

APPROVED FOR FABRICATION DATE 6/16/69 FOR P.O.N.Y.A

DRAWN BY [illegible] DATE FEB 7, 1969

APPROVED FOR FABRICATION DATE BY FOR FABRICATION

CHECKED BY T.W.CHUNG DATE FEB 7, 1969

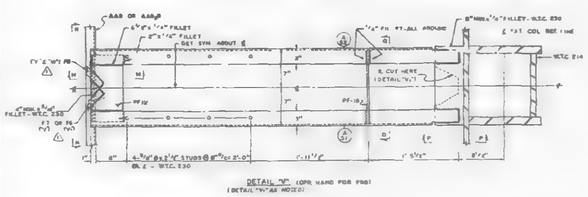
CHARGE OF PROJ. DEV.

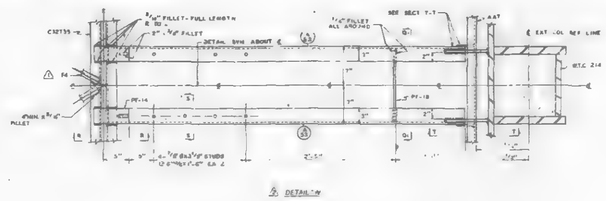
DETAILED BY A.CARL WEBER

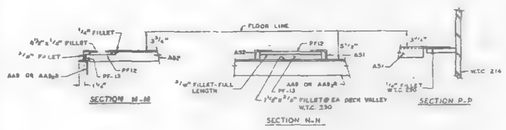
FABRICATION CONT. NO. W.T.C. 221

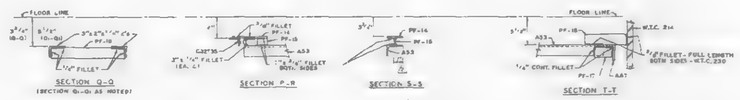
SHEET NO. FP-FB

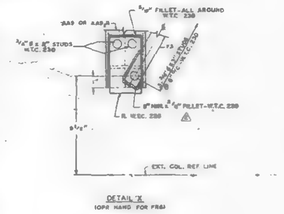
NO	DATE	REVISION	
6	6-20-69	AS NOTED	D.D.C.
4	4-16-69	REVISED	A.D.C.
			B.F.

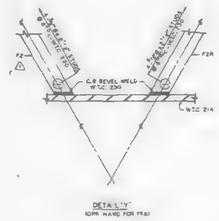


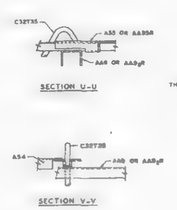


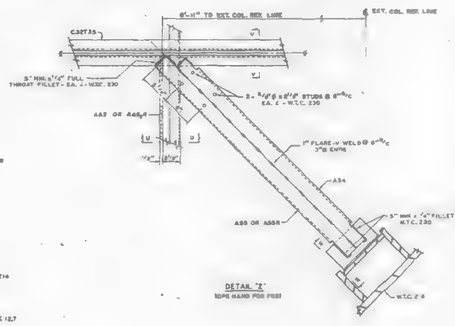


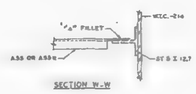


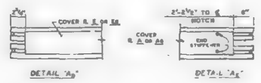












ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OR THE E-70 SERIES OR EQUAL. UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.I.C 223. STEEL DECK NOT SHOWN OR DETAILS FOR CLARITY.

REF. DRWG.

7-A83-62	1-20-69	7-A94-45.1	11-29-89
7-A83-63	1-20-69	7-A94-7	1-6-89
5A-24	1-8-68	7-A95-22	1-8-89
7-A81-30	1-8-68	7-A95-45.1	7-22-88
7-A81-31	1-8-89	7-A96-23	7-22-89
7-A81-68	1-8-89	7-A96-24	10-3-89
7-A82-18	1-8-89	7-A96-29	7-22-89
7-A82-8	1-8-89		
7-A84-31.1	1-20-69		
7-A84-36.1	1-25-69		
7-A84-86.3	2-2-89		

NO	DATE	REVISION	BY
3	4-22-69	AS NOTED	GDC
2	4-5-89	AS NOTED	GDC

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOOR PANEL DETAILS FOR PANELS FB & FR8.

FABRICATION BY LACLEDE STEEL COMPANY

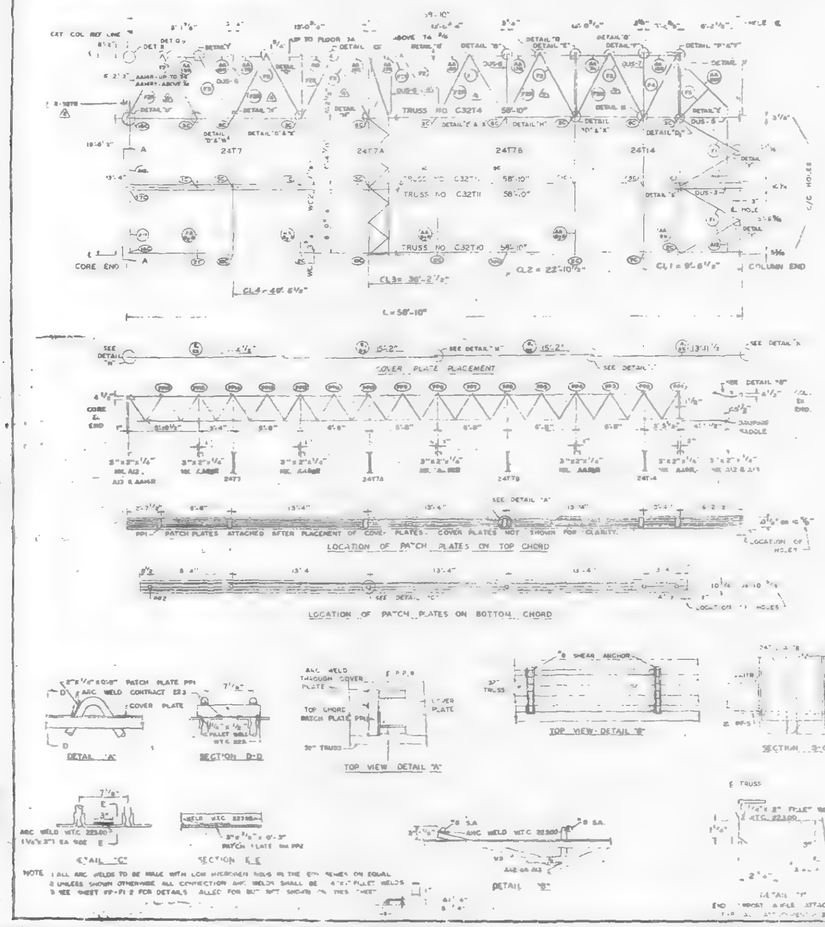
FABRICATED AT MADISON, ILLINOIS — DESIGN DRAWING NO. 7-A83-62 & #3 — PLATE

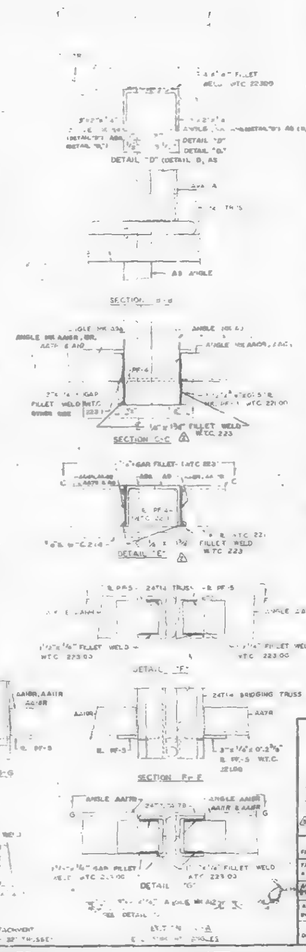
APPROVED FOR FABRICATION BY [illegible] FOR PONYA — DATE 4/26/89 — DRAWN BY [illegible] — DATE FEB 7 1989

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE — CHECKED BY T.M.CHUBA — DATE FEB 7 1989 — IN CHARGE OF PROD. DEV.

DETAILED BY [illegible] — FABRICATION CONT. NO. W.T.C. 221 — SHEET NO. FP-FB 3

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS AS SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.





CHORD ANGLES		
DIAGONAL PLATES		
WATCH PLATES		
COVER PLATES		
ANGLE CLIPS		
DAMPING SADDLE		
MISC PLATES		
8 SHEAR ANCHOR		
CORNER ANGLE ASSEMBLY		

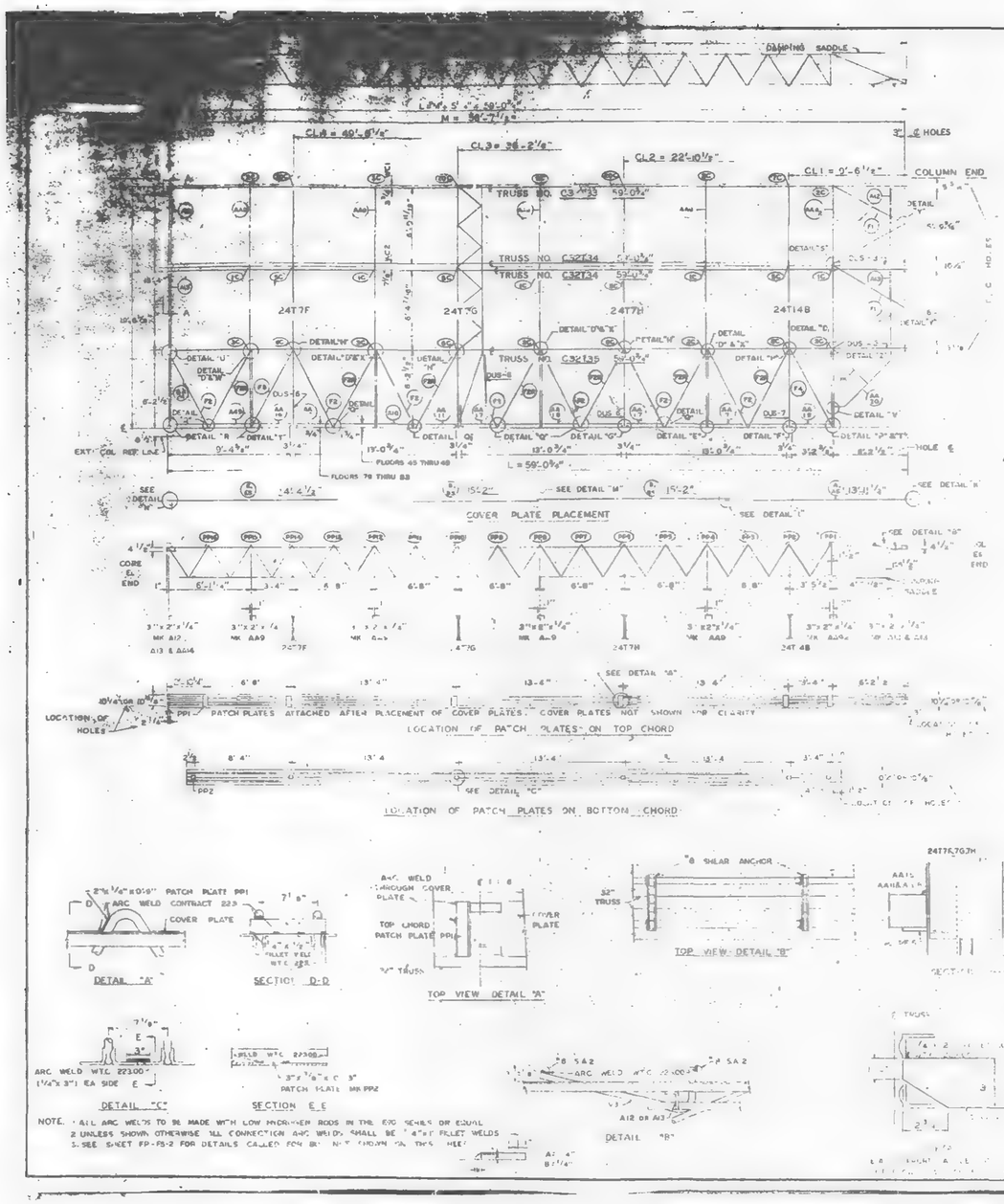
*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33 FLOOR, TOPPER A

NO.	DATE	REVISION	BY
7	6-24-68	AS NOTED	DJC
6	2-20-69	AS NOTED	DJC
5	10-1-68	F/A FPM	TMC
4	9-30-68	AS NOTED	TMC
3	9-18-68	GENERAL	TMC

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 66-66, 68-70 W/4" SLAB, TOPPING & 4" PEDESTAL
41-58 & 60-64 W/4" SLAB, TOPPING & 4" PEDESTAL
BLDG B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-98 & W/4" SLAB, TOPPING & 4" PEDESTAL

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 81.14 - 58
PLATE
DRAWN BY
DATE
CHECKED BY T.M.CHURA IN CHARGE OF DESIGN
DATE
FABRICATION JOINT NO W.T.C. 221
SHEET NO FRI



REQUIRED MATERIAL				
MATERIAL	MARK	QUAN.	SIZE	
FLOOR TRUSSES	T33	1	C33T33	
	T34	8	C32T34	
	T35	6	C32T35	
BRIDGING TRUSSES	T2F	1	24T2F	
	T7G	1	24T7G	
	T7H	1	24T7H	
	T14B	1	24T14B	
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x 7'-10"	ST 404
	A12	2	3"x2"x1/4"x 8'-11"	ST 404
	A13	2	3"x2"x1/4"x 8'-11"	ST 404
	A49	1	3"x2"x1/4"x 8'-11"	ST 413
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 404
	AA9	4	SEE REF. DRWG.	ST 404
	AA9A	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST 404
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 410
DIAGONAL FLATS	F1	4	1 1/2"x 3/8"x 6'-8"	ST 402
	F2	7	1 1/2" x 3/8" x 6'-10 1/2"	ST 402
	F3	1	1 1/2" x 3/8" x 6'-11 1/4"	ST 402
	F4	1	1 1/2" x 3/8" x 7'-0	ST 402
	F5	1	1 1/2" x 3/8" x 4'-6"	ST 402
PATCH PLATES	PP1	6	2'-6 1/4" x 1'-9"	ST 400
	PP2	6	3'-2 7/8" x 0'-3"	ST 400
COVER PLATES	A	1	9"x .0135"x 13'-11 1/2"	ST 303
	B	2	9"x .0135"x 15'-2"	ST 303
	C	1	8"x .0135"x 14'-4 1/2"	ST 303
	A6	1	8 1/2"x .0135"x 13'-11 1/2"	ST 303
	B6	2	8 1/2"x .0135"x 15'-2"	ST 303
	C6	1	8 1/2"x .0135"x 14'-4 1/2"	ST 303
ANGLE CLIPS	C2	7	2 1/2"x 1 1/2"x 3/4"x 10'-6	ST 400
	C1	8	2"x 1 1/2"x 1 1/4"x 10'-8"	ST 400
DAMPING SADDLE	DUS-5	3	3 1/2"x 3 1/2"x 3/8"x 3'-6 1/2"	ST 288
	DUS-6	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 1/2"	ST 288
	DUS-7	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 288
	DUS-8	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST 288
MISC. PLATES	PF2	2	1 1/2"x 1 1/2" x 0'-4"	ST 400
	PF3	5	3 1/2" x 1 1/2" x 0'-3"	ST 400
CONN ANGLE	C5	1	3"x 2"x 37"x 0'-3"	ST 413
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST 405
1" ø SHEAR ANCHOR	SA2	2	1" ø REBAR x 0'-9"	ST 400

NO	DATE	REVISION	BY

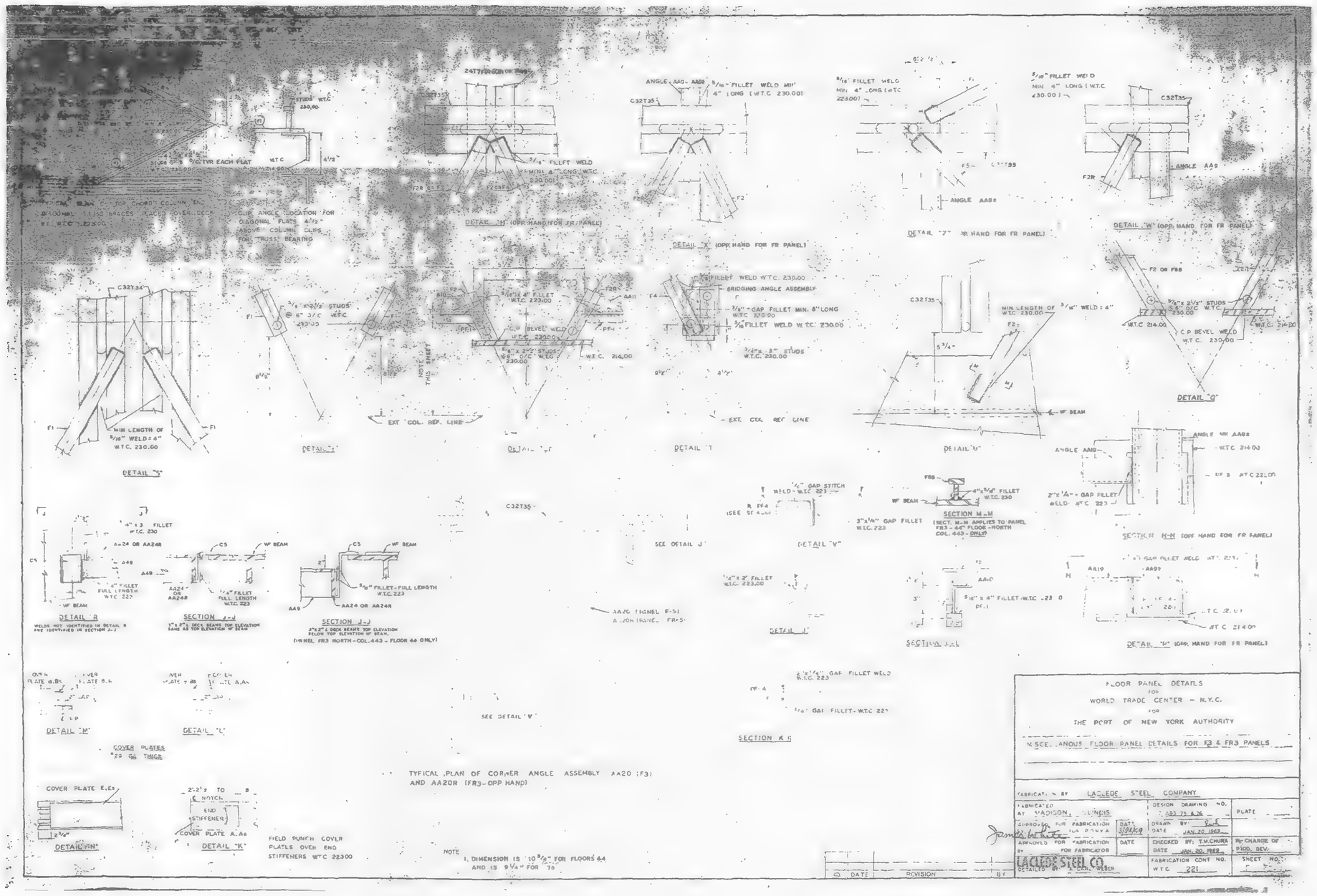
REF DRWG

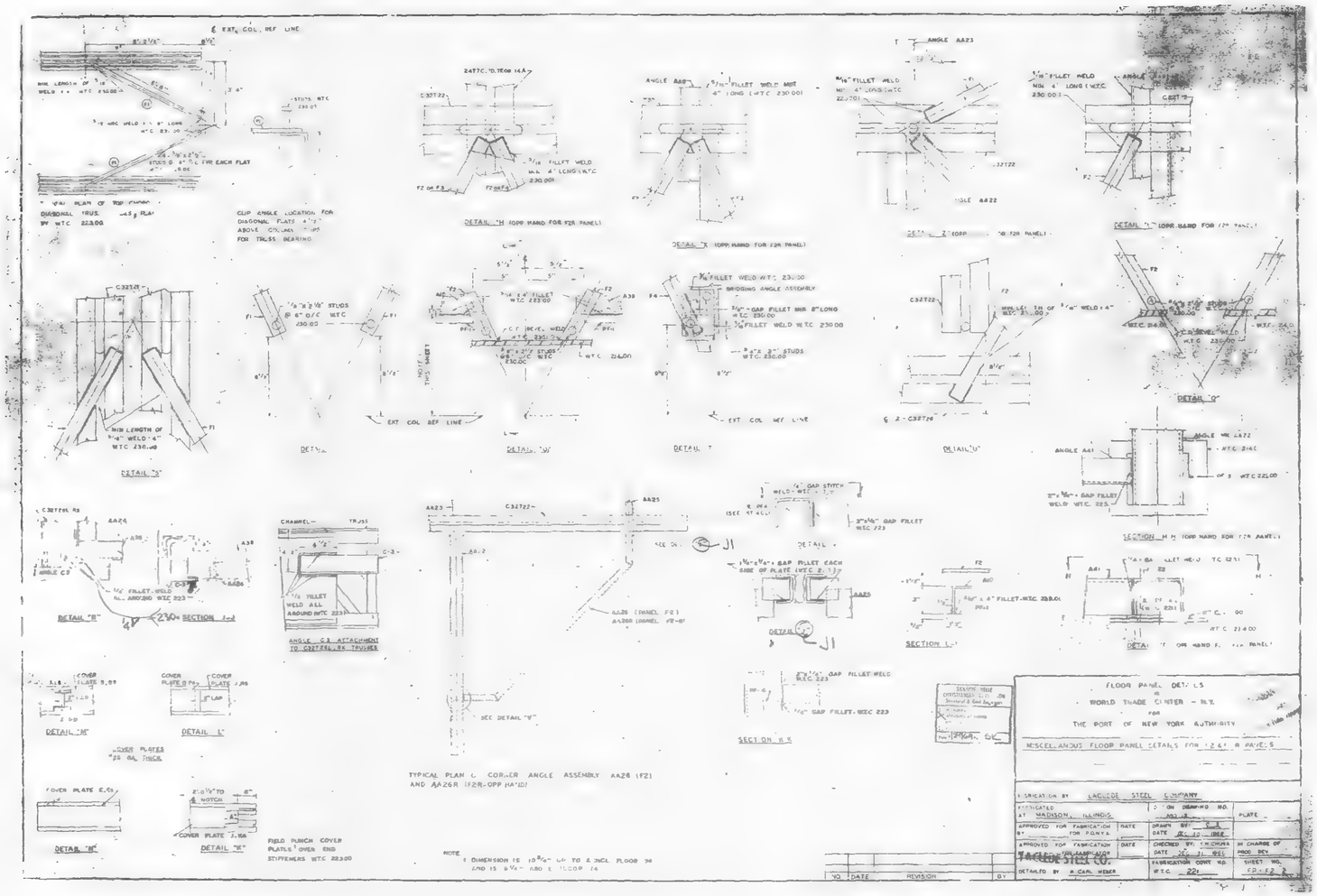
7-A9F-48	11-25-68	SA-124	1-6-69
7-A9F-47	11-25-68	7-AB4-16,M1	10-15-68
7-A9F-48	11-25-68	7-AB4-15,M8	7-22-68
7-A8F-48	11-25-68	7-AB4-21	7-22-68
7-A92-2	7-22-68	AB4-3,25	7-22-68
7-A82-9	7-22-68	AB4-29	12-3-68
7-A6-70	11-25-68	AB4-32-4,43	7-22-68
7-AB3-79	11-25-68	7-AB4-42	10-15-68
7-AB4-3	10-15-68	7-AB4-45	12-20-68

FLOOR FRAME DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOORS 78 (NORTH & SOUTH) 44 (NORTH)
PANEL F3 15'-5" x 59'-0 5/8"

FABRICATION BY LACLEDE STEEL CO.
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB2-48
PLATE
APPROVED FOR FABRICATION FOR PONYA — DATE 3/24/69 — DRAWN BY: S.A. DATE JAN. 17, 1969
APPROVED FOR FABRICATION FOR FABRICATOR — DATE — CHECKED BY: T.M.CHURA DATE JAN. 17, 1969 — IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY A. CARL WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP-F3


DETAIL "S"
DETAIL "T"
DETAIL "U"
DETAIL "V"
DETAIL "W" (OPP. HAND FOR FR PANEL)
DETAIL "X" (OPP. HAND FOR FR PANEL)
DETAIL "Y" (OPP. HAND FOR FR PANEL)
DETAIL "Z" (OPP. HAND FOR FR PANEL)
DETAIL "G"
DETAIL "H" (OPP. HAND FOR FR PANEL)
DETAIL "J"
DETAIL "K"
DETAIL "L"
DETAIL "M"
DETAIL "N"
DETAIL "R"
SECTION J-J
SECTION K-K
SECTION M-M
(SECT. M-M APPLIES TO PANEL FR3 - 44TH FLOOR - NORTH COL. 443 - ONLY)
SECTION N-N (OPP. HAND FOR FR PANEL)
EXT. COL. REF. LINE
NOTE SHEET THIS
SEE DETAIL "W"
SEE DETAIL "J"
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (FR3) AND AA20R (FR3 - OPP HAND)
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300
NOTE
1. DIMENSION IS 10 3/8" FOR FLOORS 44 AND 45 9 1/4" FOR 76
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
MISCELLANEOUS FLOOR PANEL DETAILS FOR F3 & FR3 PANELS
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR PANYNJ
DATE 3/24/69
APPROVED FOR FABRICATION BY
FOR FABRICATOR
DATE
DESIGN DRAWING NO. 593 75 & 76
PLATE
DRAWN BY: GWS
DATE JAN. 20, 1969
CHECKED BY: T.M.CHURA
DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.
FABRICATION CONT NO. WTC 221
SHEET NO.
LACLEDE STEEL CO.
DETAILED BY: L. CARL WEBER
NO. DATE REVISION BY


DETAIL "S"
DETAIL "T"
DETAIL "U"
DETAIL "V"
DETAIL "W"
DETAIL "X"
DETAIL "Y"
DETAIL "Z"
DETAIL "AA"
DETAIL "BB"
DETAIL "CC"
DETAIL "DD"
DETAIL "EE"
SECTION 1-1
SECTION K-K
SECTION M-M
TYPICAL PLAN @ CORNER ANGLE ASSEMBLY AA26 (F2) AND AA26R (F2R-OPP HAND)
ANGLE CJ ATTACHMENT TO CHANNEL IN TRUSS
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300
COVER PLATES 1/2" DIA. PUNCH
FLOOR PANEL DET: L5
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY
MISCELLANOUS FLOOR PANEL DETAILS FOR 12&1 & PAVERS
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
SHOP DRAWING NO. AQ-3
APPROVED FOR FABRICATION BY PONYA
APPROVED FOR FABRICATION BY PLANFABRICA
DRAWN BY Sunk DATE 12-10-1968
CHECKED BY C.M.CHUNA DATE 12-31-68
FABRICATION CONT NO. W.T.C. 221
DETAILED BY A. CARL WEBER
NO. DATE REVISION BY
LACLEDE STEEL CO.
PLATE
IN CHARGE OF PROD. DEV.
SHEET NO. FP-F2

NUMBERS AND LETTERS IN ELLIPSES, THUS (A1), INDICATE CONNECTION DETAILS ON CD230 — CD228.

OVERALL LENGTH : 58'-10"

L = 58'-10"

CL = 45' 6 1/2"

CL = 36'-8 7/8"

CL = 22'-10 7/8"

CL =

CORE END

COLUMN END

TRUSS NO. C32T20L 58'-10"

TRUSS NO. C32T0R 58'-10"

TRUSS NO. C32T20L 58'-10"

TRUSS NO. C32T22 58'-10"

24T7C

24T7D

24T7E

24T14A

DET

Details? Typ

EX22

DETAIL "B"

DETAIL "G"

DETAIL "H"

DETAIL "L"

92' FLOOR

25', 59' FLOORS

3" X 2" x 1/4" MK. A12, A13

3" X 2" x 1/4" MK. A20

3" X 2" x 1/4" MK. A35, A21

3" X 2" x 1/4" MK. A22, A23

3" X 2" x 1/4" MK. A23, A31

COVER PLATE PLACEMENT

PP1 PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

SEE DETAIL "C"

PP2

LOCATION OF PATCH PLATES ON BOTTOM CHORD

32" TRUSS

DETAIL "D"

SECTION F-F

ANGLE A36, A38

ANGLE A35

ANGLE A37, A40

PF-4

2'-6" ± GAP

FILLET WELD (WTC 223 00 OTHER SIDE)

SECTION G-G

ANGLE A36, A39

ANGLE A37, A40

DETAIL "E"

R PF-10 24T14A TRUSS R PF-10

ANGLE A40

ANGLE A41

DETAIL "F"

ANGLE A40

24T14A BRIDGING TRUSS

ANGLE A41

SECTION H-H

ANGLE A37 A39 & A40

24T7C,D,E

ANGLE A38

DETAIL "G"

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE PP-1

LOWER PLATE

32" TRUSS

TOP VIEW DETAIL "A"

ARC WELD WTC 223.00

DETAIL "C"

ARC WELD WTC 223.00

PATCH PLATE PP-2

SECTION E-E

ARC WELD CONTRACT 223.00

COVER PLATE

DETAIL "A"

SECTION D-D

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

DETAIL "K"

DETAIL "B"

END SUPPORT ANGLE ATTACHMENT

SECTION A-A

END SUPPORT ANGLES

SECTION B-B

END SUPPORT ANGLE

SECTION J-J

SEE SHEET FP-F2-1 FOR NOTES, REF DRWG & ADDITIONAL DETAILS

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS.	SIZE	REF. DRWG
FLOOR TRUSSES	T20L	1	C32T20L 58'-10"	ST 220L
	T20L	1	C32T20L 58'-10"	ST 221L
	T22	1	C32T22 58'-10"	ST 222
BRIDGING TRUSSES	T7C	1	24T7C - 19'-8"	ST 207C
	T7D	1	24T7D - 19'-8"	ST 207D
	T7E	1	24T7E - 19'-8"	ST 207E
	T14A	1	24T14A - 19'-8"	ST 214A
3" X 2" x 1/4" ANGLES	A10	1	3"x2"x1/4"x 2'-7 3/16"	ST 404
	A12	1	3"x2"x1/4"x 4'-1"	ST 4014
	A13	1	3"x2"x1/4"x 6'-3 1/16"	ST 404
	A21	1	3"x 2"x 1/4"x 5'-8"	ST 403
	A38	1	3"x 2"x 1/4"x 5'-11 1/2"	ST 409
	A37	1	3"x 2"x 1/4"x 2'-1 0"	ST 409
	A38	3	3"x 2"x 1/4"x 6'-4"	ST 408
	A39	1	3"x 2"x 1/4"x 7'-8"	ST 408
	A40	2	3"x 2"x 1/4"x 6'-2"	ST 407
	A41	1	3"x 2"x 1/4"x 21'-10"	ST 408
ANGLE ASSEMBLY	A28	3	SEE REF DRWG	ST 410
	A21	1	SEE REF DRWG	ST 410
	A22	1	SEE REF DRWG	ST 410
	A23	1	SEE REF DRWG	ST 410
	A24	1	SEE REF DRWG	ST 410
	A35	1	SEE REF DRWG	ST 410
	A36	1	SEE REF DRWG	ST 410
PATCH PLATES	PP	6	2'-3 1/4" x 0'-8"	ST 400
	PP2	6	3'-8" x 0'-3"	ST 400
COVER PLATES	A	1	8"x .025 x 13'-11 1/2"	ST 303
	A4	1	3"x"x.0253"x 13'-11 1/2"	ST 304
	B	2	9" x .0253" x 15'-2"	ST 303
	B4	1	3 1/2" x .0253" x 15'-2"	ST 303
	L3	1	3"x"x.0253"x 13'-2"	ST 304
	E	1	3" x .0253" x 14'-6 1/2"	ST 303
	E9	1	3 1/2" x .0253" x 14'-6 1/2"	ST 303
ANGLE CLIPS	C2	18	2"x 2" x 1/2" x 4" LONG	ST 400
DIAGONAL FLATS	F1	4	1 1/2" x 8" x 6'-8"	ST 402
	F2	1	1" x 8" x 6'-11 1/2"	ST 402
	F3	1	1" x 8" x 6'-11 1/2"	ST 402
	F4	1	1 1/2" x 8" x 7'-0"	ST 402
	F5	1	1 1/2" x 8" x 6'-4"	ST 402
MISC PLATES	PF 2	1	1" x 7 1/2" x 1'-0" x 8'-4"	ST 400
	PF 3	5	3/8" x 8" x 5'-5"	ST 400
	PF 7	1	1/2" x 8" x 0'-4"	ST 401
	PF 8	1	3" x 6" x 2'-2 1/2"	ST 40
	PF 10	8	4 1/2" x 1'-0" x 2'-2"	ST 400
	PF 11	1	3" x 1'-0" x 2'-8"	ST 410
	EX	1	SEE REF DRWG	ST 228
	A22			

SEISMIC HOLES
DWG'S 24T20 & 24T22 FOR
Structural & Civil Engineers
ONLY
(TYP 4 EA HOLE)
Mark Hole Size

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

FOR

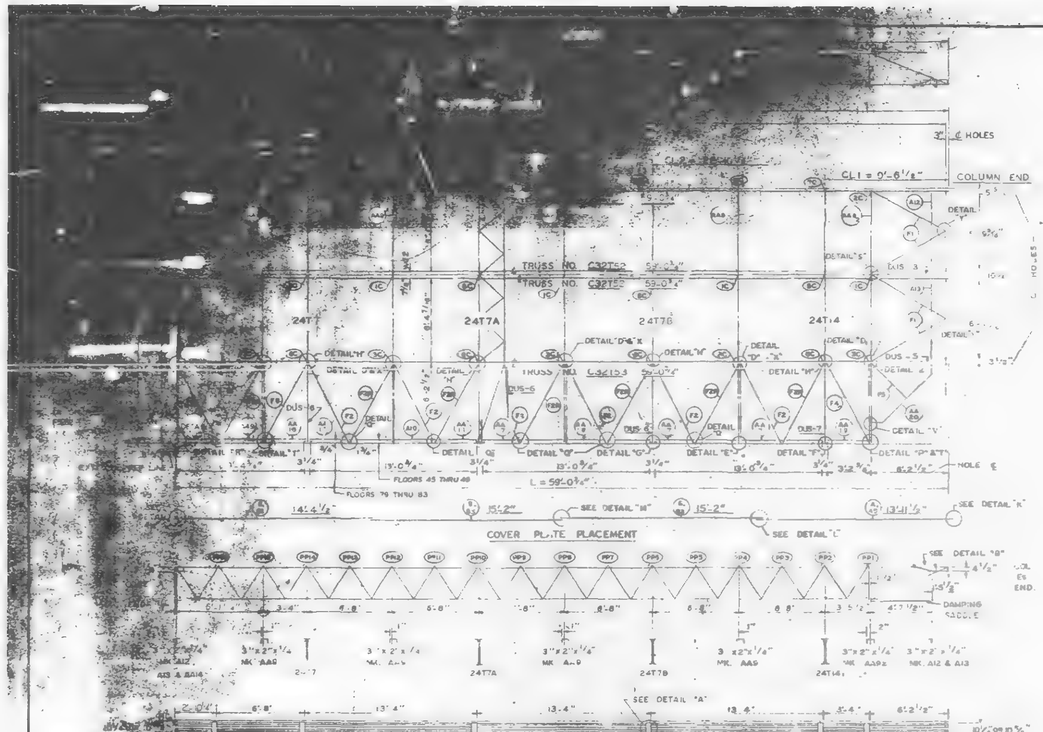
THE PORT OF NEW YORK AUTHORITY

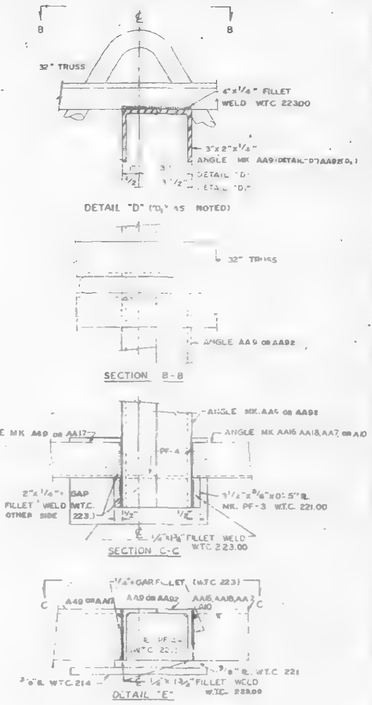
BLDG A FLOORS 20, 59 & 92 (NORTH & SOUTH)

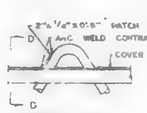
PANEL F2 19'-6" x 58'-10"

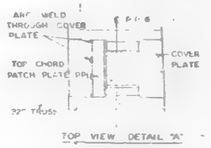
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. J-A83-34	PLATE
APPROVED FOR FABRICATION BY — FOR P.S.N.Y.A.	DATE	DRAWN BY: [illegible] DATE DEC 3 1996	
APPROVED FOR FABRICATION BY —	DATE	CHECKED BY: T.M.CHURA DATE DEC. 6 1996	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT NO. WTC 221	SHEET NO. FP - F2

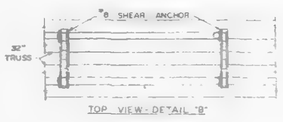
LACLEDE STEEL CO

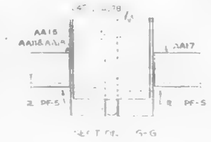


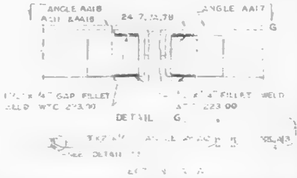












NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FILLET WELDS
3. SEE SHEET FP-F5-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL (PER ...)

MATERIAL	MK	PCS		
FLOOR TRUSSES	T51	1	C32T51 - 59'-0"	ST 402
	T52	6	C32T52 - 59'-0"	ST 402
	T53	1	C32T53 - 59'-0"	ST 402
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	ST 404
	T7A	1	24T7A - 19'-8"	ST 404
	T7B	1	24T7B - 19'-8"	ST 404
	T14	1	24T14 - 19'-8"	ST 404
3"x2"x 1/4" ANGLES	AA1	1	3"x2"x 1/4" x 2'-7 3/4"	ST 404
	AA2	2	3"x2"x 1/4" x 13'-3 1/4"	ST 404
	AA3	2	3"x2"x 1/4" x 13'-3 1/4"	ST 404
	AA4	1	3"x2"x 1/4" x 13'-8"	ST 404
ANGLE ASSEMBLY	AA7	1	SEE REF. DWG	ST 404
	AA8	4	SEE REF DRWG	ST 404
	AA8A	1	SEE REF DRWG	ST 404
	AA8B	1	SEE REF DRWG	ST 404
	AA9	1	SEE REF DRWG	ST 404
	AA24	1	SEE REF. DRWG	ST 404
DIAGONAL FLATS	F1	4	1"x 8"x 2'-8 3/8" x 6'-8"	ST402
	F2 & F2R	4	1"x 8"x 2'-8 3/8" x 6'-10 1/2"	ST402
	F3	1	1"x 8"x 2'-8 3/8" x 6'-10 1/2"	ST402
	F4	1	1"x 8"x 2'-8 3/8" x 7'-0"	ST402
	F5	1	1"x 8"x 2'-8 3/8" x 6'-4"	ST402
PATCH PLATES	PP1	6	2"x 14"x 1'-9"	ST400
	PP2	4	3"x 3"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-1 1/2"	ST303
	B	2	9"x 0.135"x 15'-2"	ST303
	E	1	9" x 0.135"x 14'-4 1/2"	ST303
	B5	1	3 1/2"x 0.135"x 13'-11 1/2"	ST303
	B5	2	3 1/2"x 0.135"x 15'-2"	ST303
	E5	1	3 1/2"x 0.135" x 14'-4 1/2"	ST303
DIAGONAL FLAT	F8A	4	SEE REF DRWG	ST 402
3/4" Ø SHEAR ANCHOR	SA2	2	3/4" Ø REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/8"x 6 1/4"x 3/4"x 8'-3 1/4"	ST288
	DUS-5	1	3 1/8"x 13 1/4"x 3/4"x 8'-3 1/4"	ST288
	DUS-6	3	3 1/8"x 3 1/4"x 3/4"x 4'-4 3/8"	ST288
	DUS-7	1	3 1/8"x 3 1/2"x 3/4"x 4'-4 3/8"	ST288
MISC. PLATES	PF-1	2	1'-3"x 1'-2" x 0'-4"	ST400
	PF-3	5	3"x 3"x 0'-3"	ST400
CONN. ANGLE	C5	1	3"x 3"x 0'-3"	ST400
ANGLE CLIP	C1	9	2"x 1 1/2"x 4"x 0'-6"	ST400
	C2	7	2 1/2"x 1 1/2"x 4"x 0'-6"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE PFF DRWG	ST405

NO	DATE	REVISION	BY

REF. DRWG.

7-AM-48	11-25-68	SA-124	1-8-69
7-PF-47	11-25-68	7-AB4-14,16,1	10-15-68
7-AB-48	11-25-68	7-AB4-15,18	7-22-68
7-A82-2	7-22-68	7-AB4-23	7-22-68
7-A82-9	7-22-68	7-AB4 23,25	7-22-68
7-AB3-70	11-25-68	7-AB4-29	1-3-69
7-AB3-75	11-25-68	7-AB4 30-41,43	7-22-68
7-AB4-3	10-15-68	7-AB4-42	10-15-68
		7-AB4-45	12-20-68

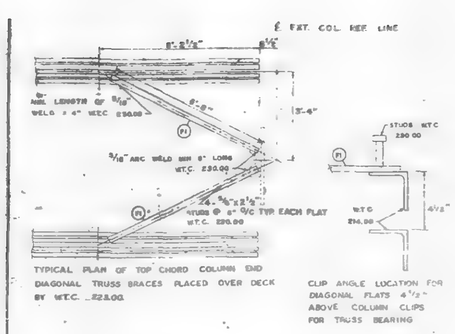
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

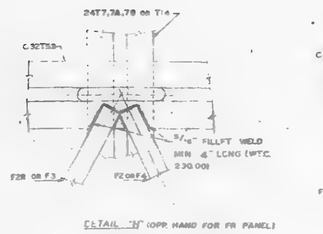
BLDG. A FLOORS 45 (NORTH & SOUTH) 46-49 (SOUTH) 79-83 (NORTH)

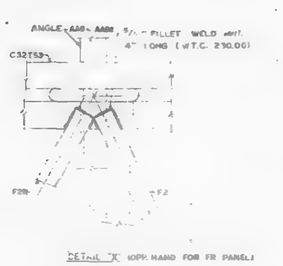
PANEL F5 19'-8" x 59'-0 7/16"

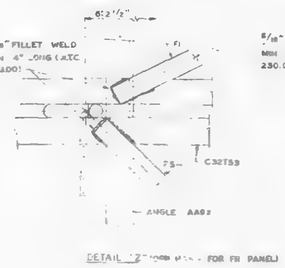
FABRICATION BY LACLEDE STEEL COMPANY

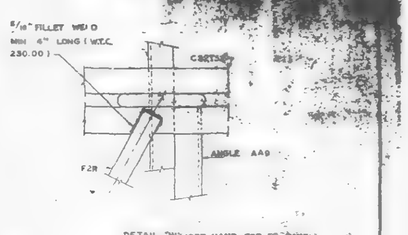
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB4-74	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 3/24/69	DRAWN BY G.R. DATE JAN 17, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.H. CHURA DATE JAN 17, 1969	IN CHARGE OF PROD. DEPT.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F5

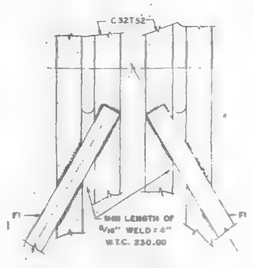


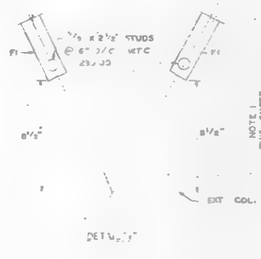


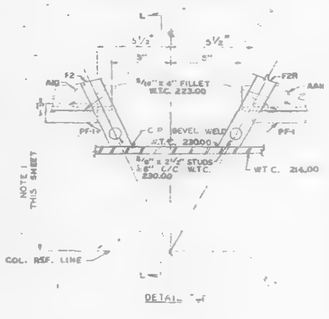


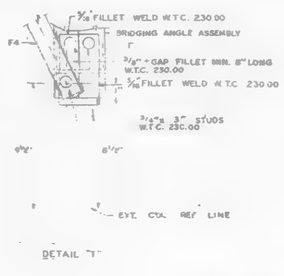


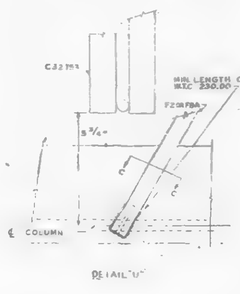


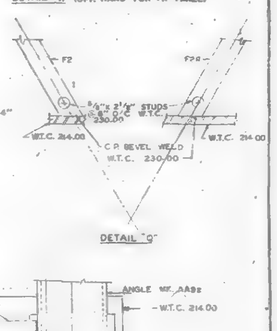


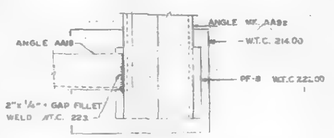


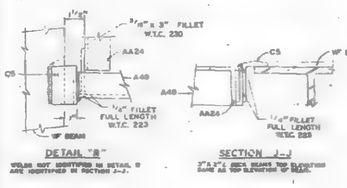


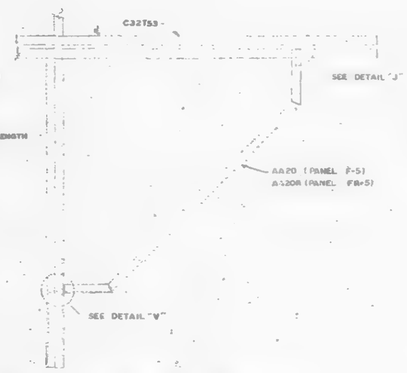


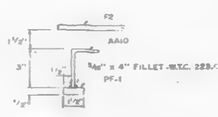


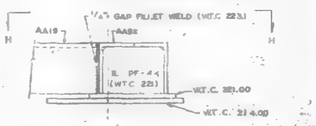


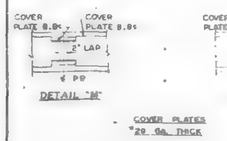












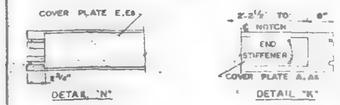


TABLE "1A"				
	DIM "A" @ COL. LINE			
PL	417	443	217	243
45	1 1/2"	0	0	0
46	1 1/2	1 1/2	1 1/2	1 1/2
47	1 1/2	1 1/2	1 1/2	1 1/2
48	1 1/2	1 1/2	1 1/2	1 1/2
49	0	0	0	0
79	0	1"±	0	0
80	1 1/2	1 1/2	1 1/2	1 1/2
81	1 1/2	1 1/2	1 1/2	1 1/2
82	1 1/2	1 1/2	1 1/2	1 1/2
83	0	0	0	0

F2 USED WHEN DIM "A" = 0
FBA

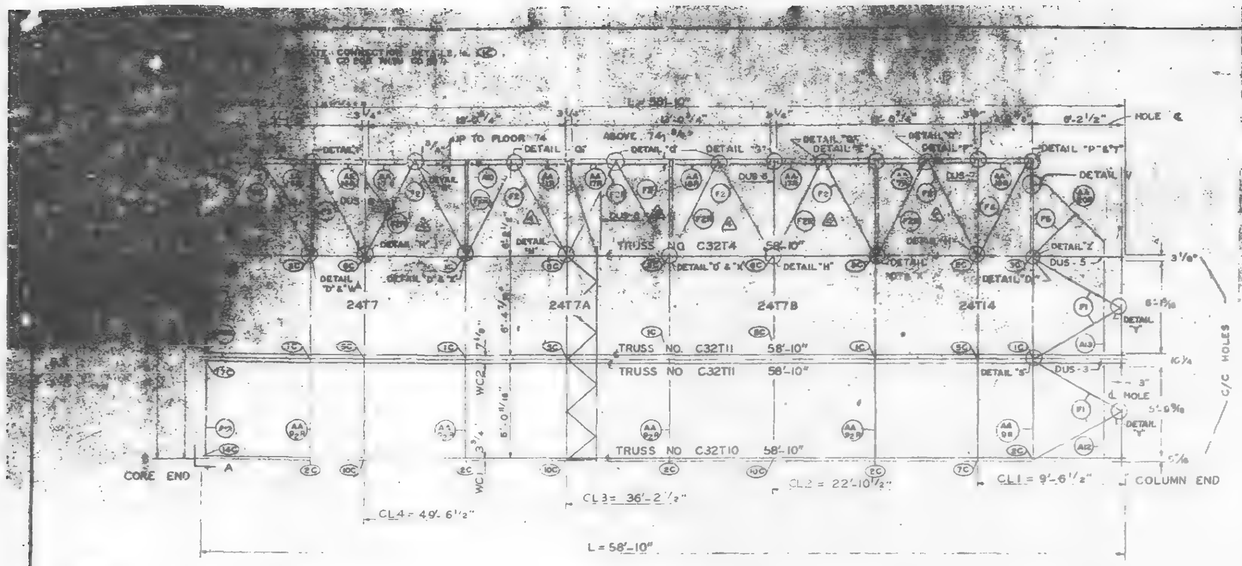
NOTE
1. DIMENSION IS 10 3/4" FOR FLOORS 45-48 (SOUTH) 45 (NORTH), AND 15 9 1/4" FOR 79-83 (NORTH).

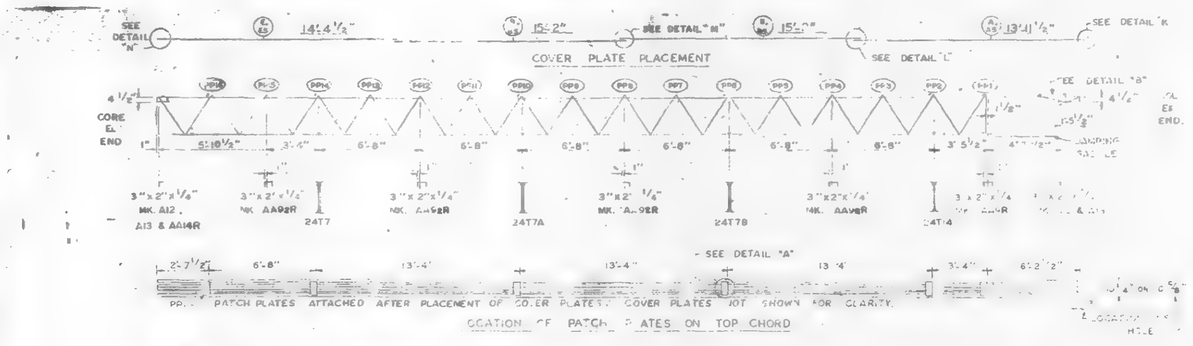
NO.	DATE	REVISION	BY

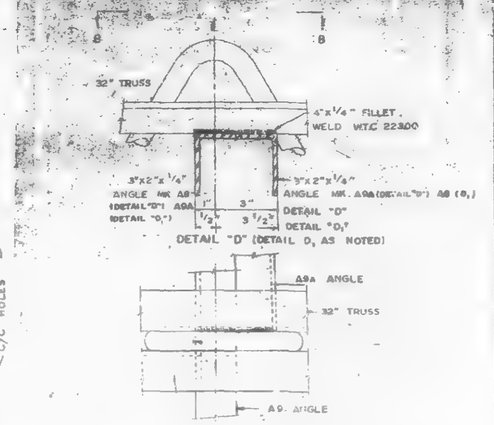
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

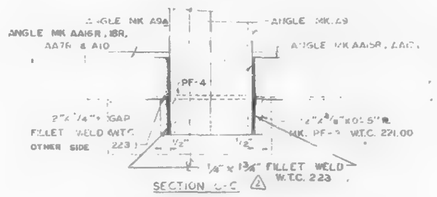
MISCELLANOUS FLOOR PANEL DETAILS FOR FS & FRS PANELS

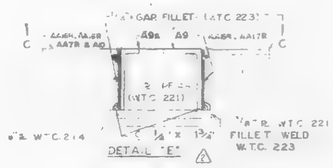
FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
IN DRAWING NO. 73 & 28
PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY
DATE 3/24/69
DRAWN BY Ruth
DATE JAN. 20, 1969
APPROVED FOR FABRICATION FOR FABRICATOR BY
DATE
CHECKED BY: T.H. CHURA
DATE JAN. 20, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY J. CARL WARREN
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FP - FS-2

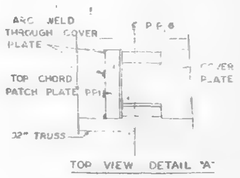


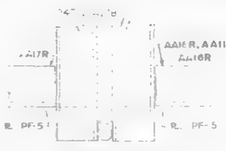


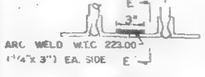


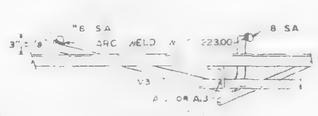


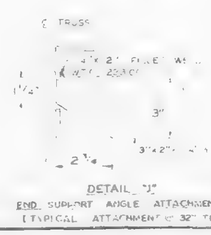


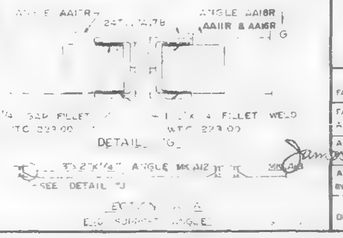












NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL FOR 33rd FLOOR, TOWER "A"

MATERIAL	MK	REQ'D	SIZE & LENGTH	SPEC
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST400
	T11	2	C32T11 - 58'-10"	ST400
	T4	1	C32T4 - 58'-10"	ST400
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 29'-6"	ST207
	T7B	1	24T7B - 39'-6"	ST207
	T14	1	24T14 - 19'-6"	ST207
3"x2"x 1/4" ANGLES	A10	1	3"x2"x1/4"x 2'-7 5/8"	ST406
	A 9	2	3"x2"x 1/4"x 6'-3 3/16"	ST406
	A12	2	3"x2"x 1/4"x 5'-11 15/16"	ST406
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	4	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	1	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA7R	3	SEE REF. DRWG.	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	PF1	4	1 1/2"x 3/8" x 6'-8"	ST402
	PF2	7	1 1/2"x 3/8" x 6'-10 1/2"	ST402
	PF3	1	1 1/2"x 3/8" x 6'-11 1/4"	ST402
	PF4	1	1 1/2" x 3/8" x 7'-0"	ST402
	PF5	1	1 1/2"x 3/8" x 4'-4"	ST402
GUSSET PLATES	PP1	6	2"x1/4"x 0'-9"	ST400
	PP2	6	3"x5/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x0.135"x 13'-11 1/2"	ST303
	B	2	9"x0.135"x 15'-[illegible]	ST303
	E	1	9"x0.135"x 14'-4 1/2"	ST303
	A9	1	3 1/2"x0.135"x13'-11 1/2"	ST303
	B9	2	3 1/2"x 0.135"x 15'-[illegible]	ST303
	E9	1	3 1/2"x 0.135"x14'-4 1/2"	ST303
ANGLE CLIPS*	C2	4	2" x 1 1/2"x 1/4" x 0'-6"	ST401
	C1	12	2"x 1 1/2" x 1/4" x 0'-5"	ST401
CAMPING CADDLE	CJS-3	1	3"x2"x3 1/2"x 3/16" x 1'-6"	ST203
	CJS-5	1	3 1/2"x3 1/2"x 3/16" x 1'-6 3/8"	ST203
	CJS-6	3	3 1/2"x 3 1/2"x 3/16" x 1'-4 1/8"	ST203
	CJS-7	1	3 1/2"x 3 1/2"x 3/16" x 1'-4 1/8"	ST203
MISC. PLATES	BF-1	2	1 1/2"x 1/2" x 0'-4"	ST400
	PF-1	1	5" x 3/8" x 1'-[illegible]	ST401
	PF-3	5	3" x 3/8" x 0'-[illegible]	ST402
"B" SHEAR ANCHOR	SA2	2	"B" REBAR x 0'-9"	ST400
CORNER ANGLE ASSEMBLY	AA*	1	SEE REF. DRWG	ST405

*CLIP ANGLE CHANGE BECOMES EFFECTIVE WITH 33rd FLOOR, TOWER "A".

NO	DATE	REVISION	BY
4	3-20-69	AS NOTED*	G.D.C.
3	10-11-68	F2 & F2R	T.M.C.
2	9-30-68	AS NOTED	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG

7-A81-9	5-10-68	7-A84-14,14.1	1-3-68
7-A81-9	5-10-68	7-A84-15,16	5-8-68
7-A81-10	5-10-68	7-A84-21	1-3-68
7-AR2-2	4-1-68	7-A84-23-25	4-1-68
7-AH2-9	4-1-68	7-A84-23A2	4-1-68
7-A82-2	1-3-68	7-A84-39-41,43	1-3-68
7-A83-13	5-10-68	7-A84-42	4-1-68
7-A84-3,3.1,4	1-3-68	7-A84-45,47,48	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

E & G A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 94-01 (NORTH); PANEL FRI 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-14 5-10-68	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 4/1/69	DRAWN BY: G.A. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR1

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

DETAIL "H" (OPP. HAND FOR FR PANEL)

DETAIL "X" (OPP. HAND FOR FR PANEL)

DETAIL "Z" (OPP. HAND FOR FR PANEL)

DETAIL "W" (OPP. HAND FOR FR PANEL)

DETAIL "S"

DETAIL "J"

DETAIL "T"

DETAIL "U"

DETAIL "Q"

DETAIL "N"

DETAIL "K"

DETAIL "M"

DETAIL "L"

SECTION J-J

SECTION K-K

SECTION H-H (OPP HAND FOR FR PANEL)

DETAIL "P" (OPP. HAND FOR FR PANEL)

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

NO	DATE	REVISION	BY
3	3-20-69	AS NOTED	G.D.C.
2	9-30-68	AS NOTED	T.M.C.
1	9-20-68	GENERAL	T.M.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A83-13 5-10-68

PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY: James Lobb DATE 4/1/69

DRAWN BY: G.K. DATE JULY 15, 1968

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

CHECKED BY: T.M.CHUBA DATE JULY 16 1968

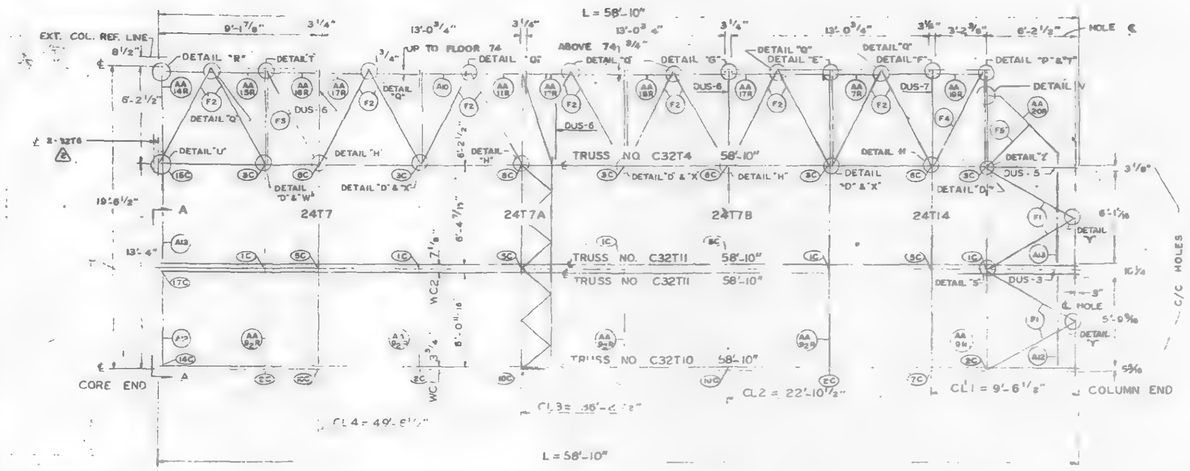
IN CHARGE OF PROD. DEV.

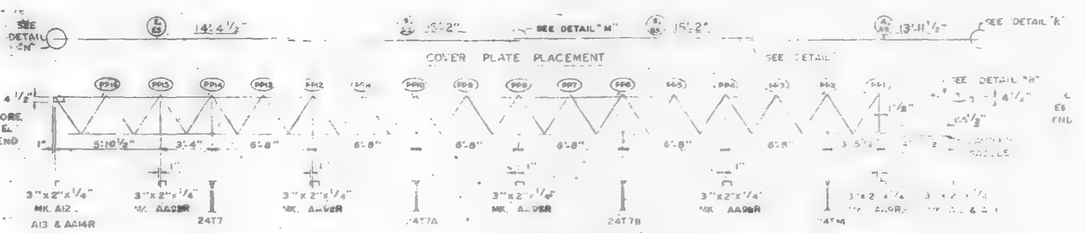
DETAILED BY LACLEDE STEEL CO.

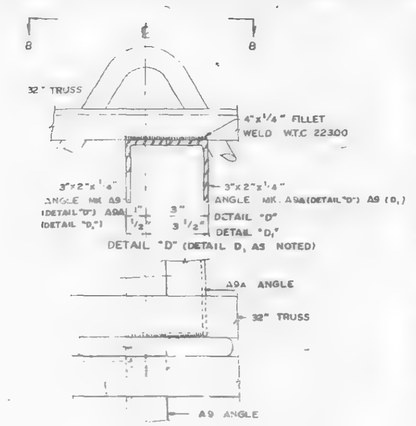
FABRICATION CONT. NO. W.T.C. 321

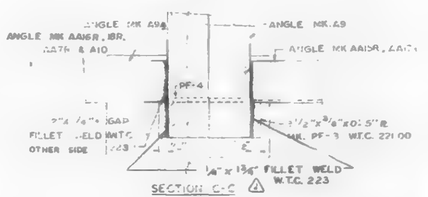
SHEET NO. FP-F1-7

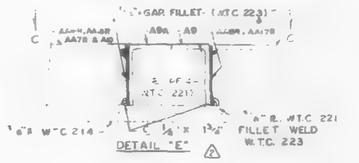
LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1C). ON SHEETS CD 201, CD 202, CD [redacted] & CD 205 THRU CD 207.

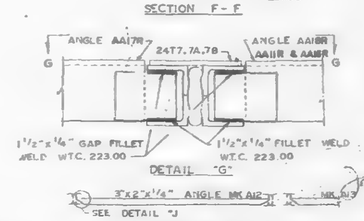


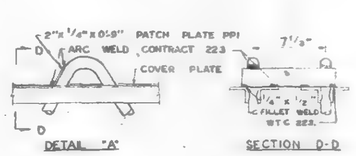


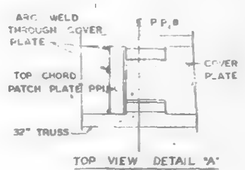


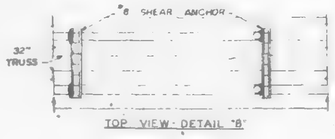


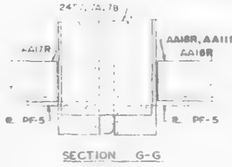


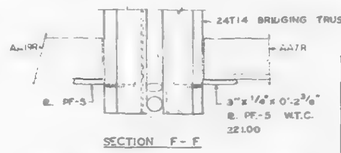


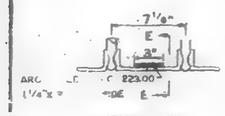


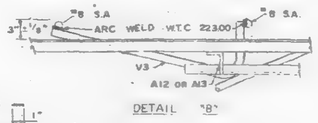


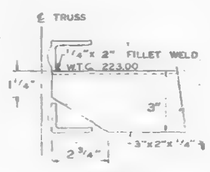












NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-8"	ST207A
	T7B	1	24T7B - 19'-6"	ST207B
	T14	1	24T14 - 19'-6"	ST214
3"x2"x 1/4" ANGLES	A10	.	3"x2"x1/4"x 2'-5 15/16"	ST404
	A13	2	3"x 2"x1/4"x 6'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x 5'-11 15/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA7B	3	SEE REF. DRWG.	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
(3)	F2, F2R	7	1 1/2" x 5/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8"x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x 1/4"x 0'-8"	ST400
	PP2	5	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST303
	B	2	9"x 0.135"x 15'-2"	ST303
	E	1	9"x 0.135"x 14'-4 1/2"	ST303
	A8	1	3 1/2"x 0.135"x 13'-11 1/2"	ST303
	B8	2	3 1/2"x 0.135"x 15'-2"	ST303
	E8	1	3 1/2"x 0.135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
#8 SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3"x 2"x 3 1/2"x 3/8"x 3'-6 7/16"	ST298
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 5'-6 3/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3"x 2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST298
MISC. PLATES	PF-1	2	1 1/2"x 1 1/2"x 0'-4"	ST400
	PF-7	1	5" x 3/8" x 4'- (4)	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-10"	ST403
CORNER ANGLE ASSEMBLY	AA2R	.	SEE REF. DRWG	ST403

(3)	10-11-68	F2 & F2R	T.M.C.
(2)	9-30-68	AS NOTED	T.M.C.
1	8-19-68	GENERAL	T.M.C.
NO	DATE	REVISION	BY

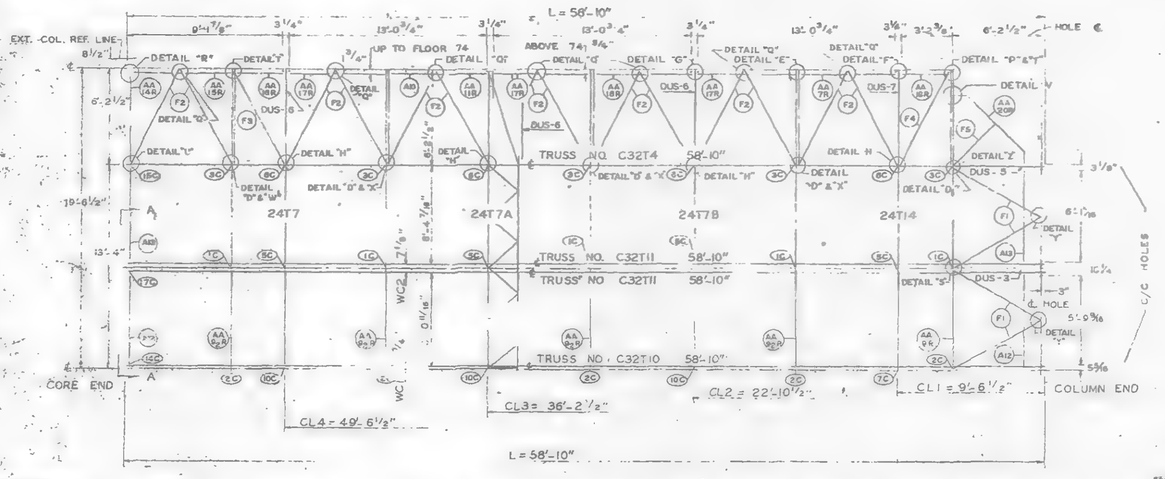
REF. DRWG.		SA-124	10-20-67
7-AB4-3	5-10-68	7-AB4-14,14.1	1-3-68
7-AB4-8	5-10-68	7-AB4-15,16	5-8-68
7-AB4-10	5-10-68	7-AB4-21	1-3-68
7-A82-2	4-1-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29,38.2	4-1-68
7-AB3-2	1-3-68	7-AB4-30-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,47,47.1	4-1-68

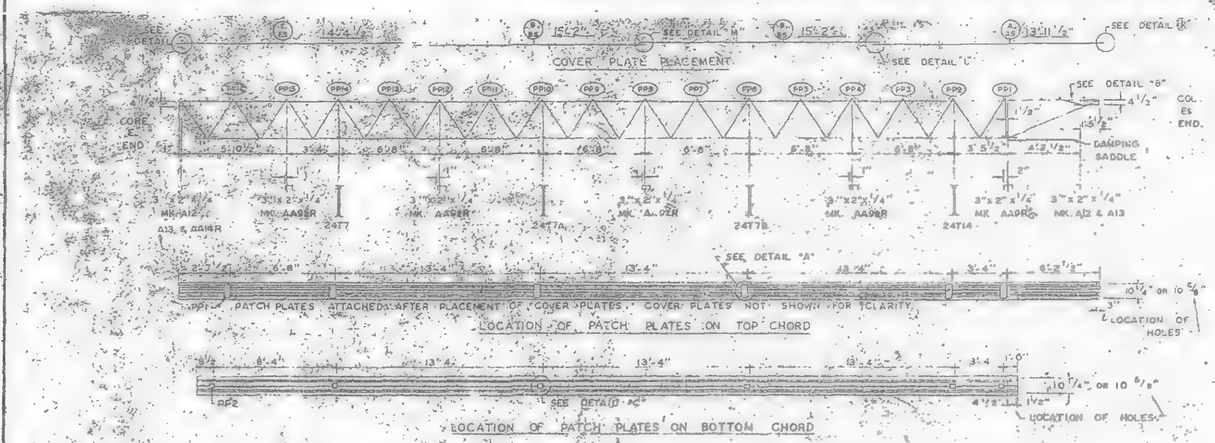
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FRI 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-14 5-10-68	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 10/14/68	DRAWN BY: D.R. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. WK.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FRI

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1C). SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.

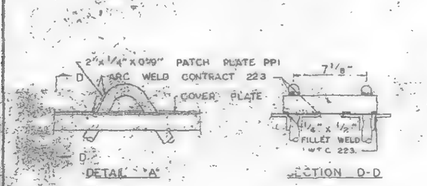


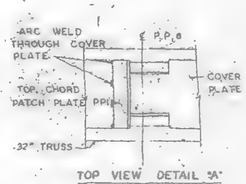


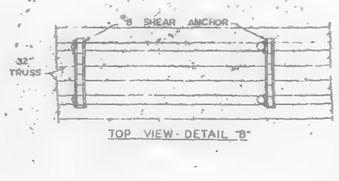
PP1, PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

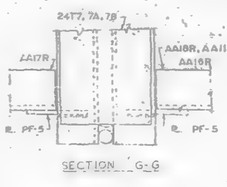
LOCATION OF PATCH PLATES ON TOP CHORD

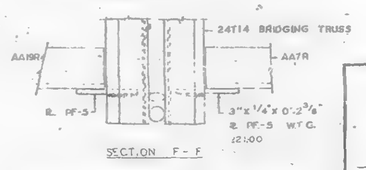
LOCATION OF PATCH PLATES ON BOTTOM CHORD

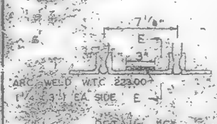




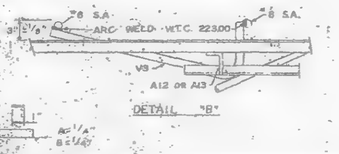


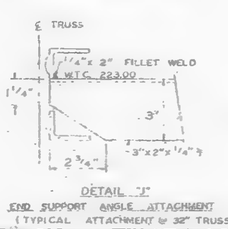


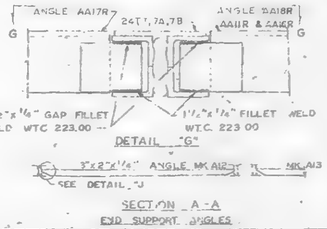


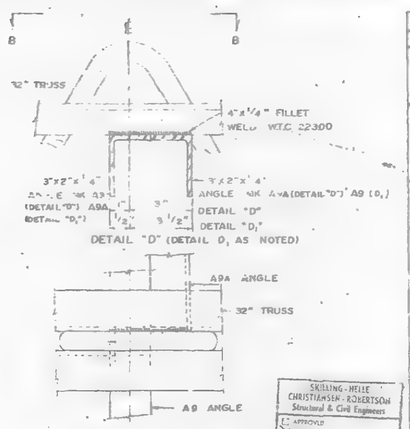


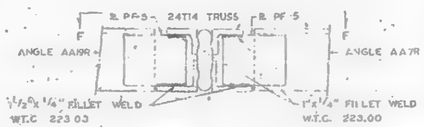
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES, OR EQUAL. UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS. SEE SHEET FP-FRI2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.











REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1C	1	C32T1C - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	BT207
	T7A	1	24T7A - 19'-6"	BT207A
	T7B	1	24T7B - 19'-6"	BT207B
	T14	1	24T14 - 19'-6"	BT214
3"x2"x 1/4" ANGLES	AA9	1	3"x2"x1/4"x2'-7 7/16"	ST404
	A13	2	3"x2"x1/4"x5'-3 7/16"	ST404
	A12	2	3"x2"x1/4"x4'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA8R	1	SEE REF. DRWG.	ST406
	AA9R	4	SEE REF. DRWG.	ST406
	AA11R	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA15R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST408
	AA17R	3	SEE REF. DRWG.	ST405
	AA18R	1	SEE REF. DRWG.	ST400
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1"/2"x 5/8"x 6'-8"	ST402
	F2	14	1 1/2"x 5/8"x 8'-10 1/2"	ST402
	F3	1	1 1/2"x 5/8"x 8'-11 1/4"	ST402
	F4	1	1 1/2"x 5/8"x 7'-0"	ST402
	F5	1	1 1/2"x 5/8"x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x1/4"x 0'-9"	ST400
	PP2	6	3"x 3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x.0135"x 13'-11 1/2"	ST303
	B	2	9"x.0135"x 15'-2"	ST303
	E	1	9"x.0135"x 14'-4 1/2"	ST303
	As	1	3 1/2"x.0135"x13'-11 1/2"	ST303
	Bs	2	3 1/2"x.0135"x15'-2"	ST303
	Es	1	3 1/2"x.0135"x14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2"x1 1/2"x1/4"x0'-6"	ST400
3/4" ø SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x3 1/2"x3/8"x3'-6 7/8"	ST299
	DUS-5	1	3 1/2"x3 1/2"x3/8"x 5'-6 7/8"	ST299
	DUS-6*	3	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1"/2"x 1'/2"x 0'-4"	ST400
	PF-7	1	5" x 3 1/2" x 4"	ST401
	PF-3	5	3 1/2"x 3 1/2"x 3/8"x 0'-5"	ST403
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

7-A14-8	5-10-68	SA-124	10-20-67
7-A81-8	5-10-68	7-A84-14,14.1	1-3-68
7-A81-9	5-10-68	7-A84-15,16	5-8-68
7-A81-10	5-10-68	7-A84-21	1-3-68
7-A82-2	4-1-68	7-A84-23-25	4-1-68
7-A82-9	4-1-68	7-A84-29-38.2	4-1-68
7-A83-2	1-3-68	7-A84-39-41,43	1-3-68
7-A83-13	5-10-68	7-A84-42	4-1-68
7-A84-3,3.1,4	1-3-68	7-A84-45,47,47.1	4-1-68

SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
RETURNED
Date 2/5/68 J. SK

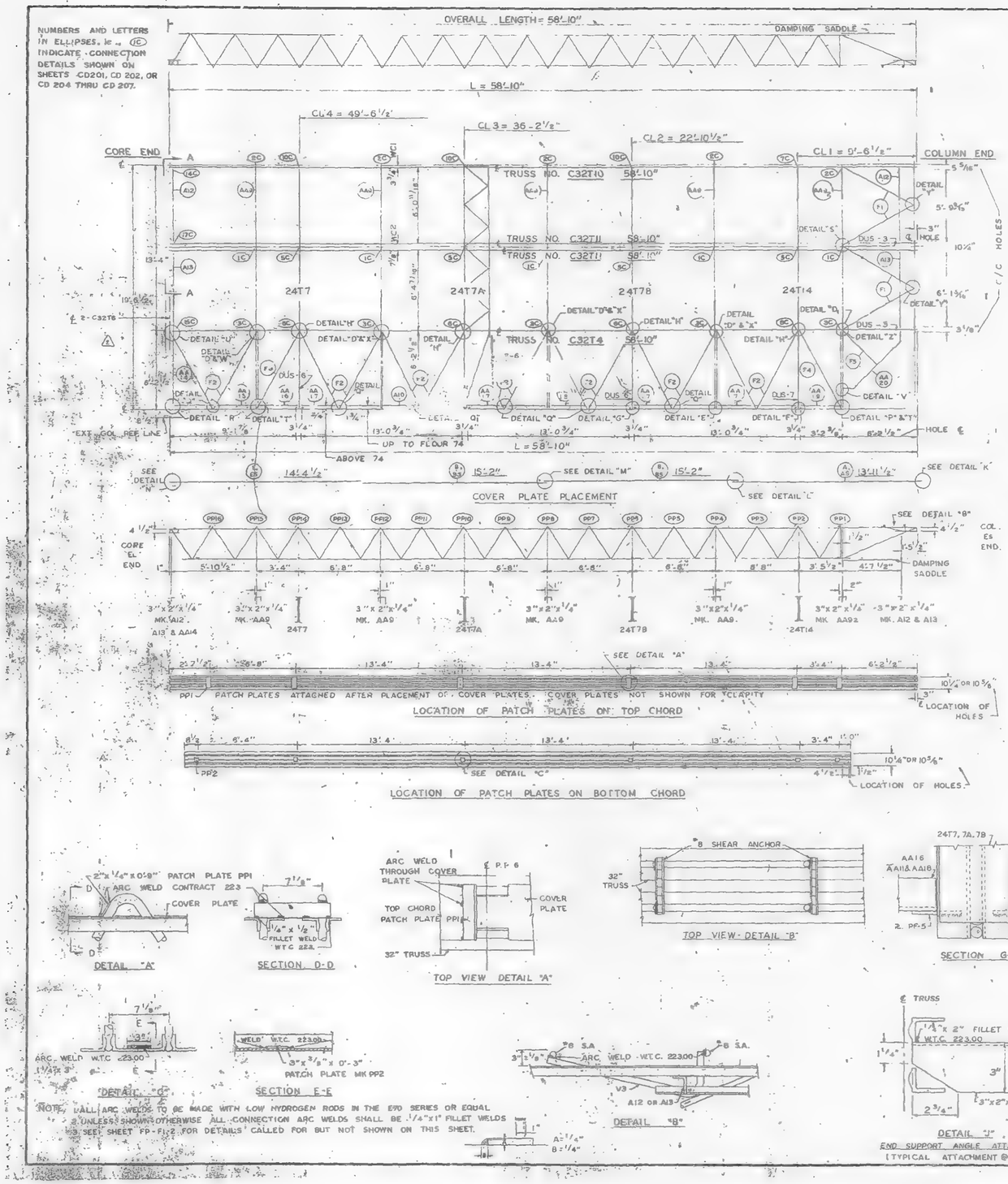
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

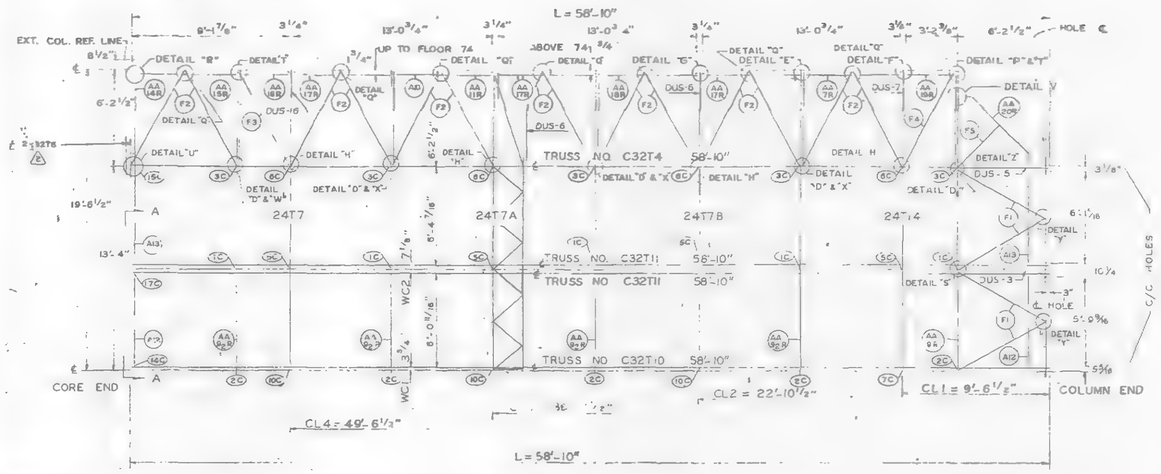
FABRICATION BY: LACLEDE STEEL COMPANY

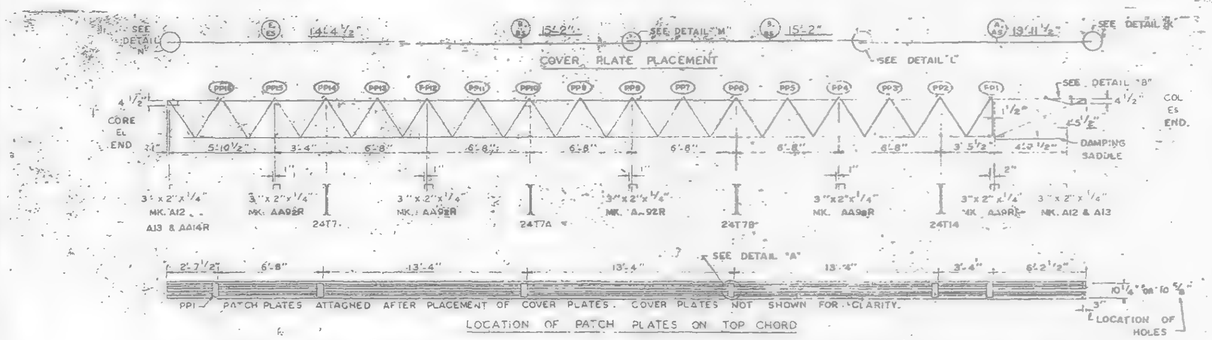
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-14 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: D.R. DA: JULY 15, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FR1

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202, OR CD 204 THRU CD 207.

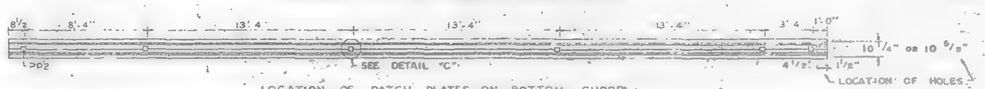

OVERALL LENGTH = 58'-10"
DAMPING SADDLE
L = 58'-10"
CL 4 = 49'-6 1/2"
CL 3 = 36-2 1/2"
CL 2 = 22'-10 1/2"
CL 1 = 5'-6 1/2"
CORE END
COLUMN END
TRUSS NO. C32T10 58'-10"
TRUSS NO. C32T11 58'-10"
TRUSS NO. C32T11 58'-10"
TRUSS NO. C32T4 58'-10"
24T7
24T7A
24T7B
24T14
DETAIL "S"
DETAIL "Y"
DETAIL "Z"
DETAIL "V"
DETAIL "R"
DETAIL "T"
DETAIL "U"
DETAIL "W"
DETAIL "X"
DETAIL "Q"
DETAIL "G"
DETAIL "E"
DETAIL "F"
DETAIL "P" & "T"
DETAIL "H"
DETAIL "D" & "X"
DETAIL "D"
DETAIL "O"
DETAIL "N"
DETAIL "M"
DETAIL "K"
DETAIL "L"
DETAIL "B"
DETAIL "C"
DETAIL "A"
DETAIL "J"
DETAIL "I"
DETAIL "H"
DUS-3
DUS-6
DUS-7
3" HOLE
C/C HOLES
HOLE ℄
EXT. COL. REF LINE
ABOVE 74
UP TO FLOOR 74
COVER PLATE PLACEMENT
CORE EL. END
DAMPING SADDLE
COL. ES END.
SEE DETAIL "N"
SEE DETAIL "M"
SEE DETAIL "K"
SEE DETAIL "L"
SEE DETAIL "B"
SEE DETAIL "A"
SEE DETAIL "C"
PP16 PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1
3" x 2" x 1/4" MK. AA12, A13 & AA14
3" x 2" x 1/4" MK. AA9
3" x 2" x 1/4" MK. AA9
3" x 2" x 1/4" MK. AA9

LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (5C).
SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.

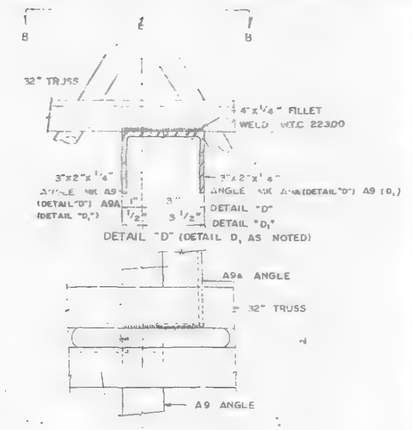


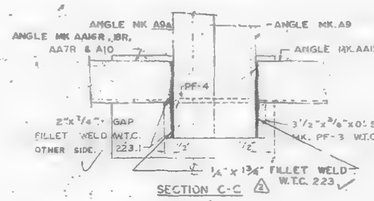


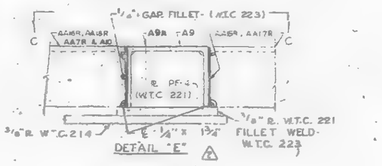
LOCATION OF PATCH PLATES ON TOP CHORD

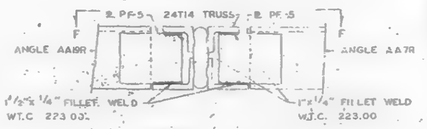


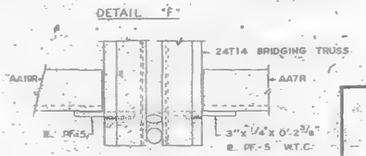
LOCATION OF PATCH PLATES ON BOTTOM CHORD

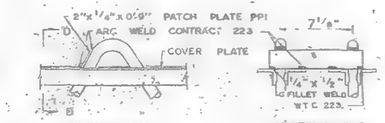


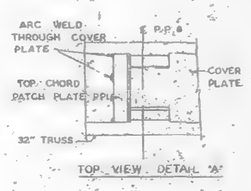


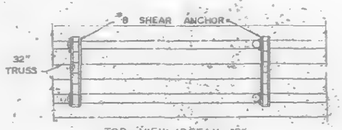


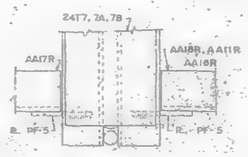


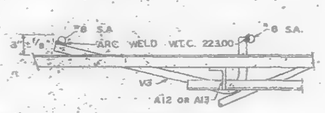


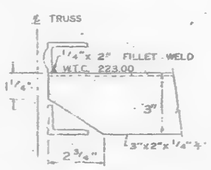


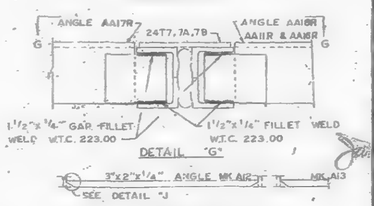












NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	NOS	SIZE	REF DWG
FLOOR TRUSSES	T1C	1	C32T4 - 58'-10"	ST201
	T-1	2	C32T11 58'-10"	ST201
	T-4	1	C32T4 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T7B	1	24T7B 19'-6"	ST207B
	T14	1	24T14 - 19'-6"	ST214
3"x 2"x 1/4" ANGLES	A10	*	3"x2"x1/4"x2'-5 7/16"	ST404
	A 3	2	3"x2"x1/4"x6'-3/16"	ST404
	A12	2	3"x2"x1/4"x5'-11 7/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG.	ST406
	AA9R	1	SEE REF. DRWG.	ST406
	AA9ER	1	SEE REF. DRWG.	ST406
	AA14R	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA9BR	1	SEE REF. DRWG.	ST406
	AA16R	1	SEE REF. DRWG.	ST406
	AA17R	3	SEE REF. DRWG.	ST406
	AA18R	1	SEE REF. DRWG.	ST406
	AA19R	1	SEE REF. DRWG.	ST406
DIAGONAL FLATS	F1	4	1 1/2"x 3/8" x 6'-8"	ST402
	F2	14	1 1/2" x 3/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 3/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8" x 7'-0"	ST402
	F5	1	1 1/2" x 3/8" x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x1/4"x 0'-9"	ST400
	PP-2	6	3"x3/8"x 0'-3"	ST400
COVER PLATES	A	1	19"x 0.135"x 13'-11 1/2"	ST303
	B	2	19"x 0.135"x 15'-2"	ST303
	E	1	9"x 0.135"x 14'-4 1/2"	ST303
	A5	1	3 1/2"x 0.135"x 13'-11 1/2"	ST303
	B5	2	3 1/2"x 0.135"x 15'-2"	ST303
	E5	1	3 1/2"x 0.135"x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2"x 1 1/2"x 1/4"x 0'-6"	ST400
ø 8 SHEAR ANCHOR	SA2	2	ø REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2"x 3 1/2"x 3/8"x 3'-8 7/8"	ST299
	DUS-5	1	3 1/2"x 3 1/2"x 3/8"x 5'-8 3/8"	ST299
	DUS-6	3	3 1/2"x 3 1/2"x 3/8"x 6'-4 7/8"	ST299
	DUS-7	1	3 1/2"x 3 1/2"x 3/8"x 6'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2"x 1 1/2"x 0'-4"	ST400
	PF-7	1	5" x 3/8" x 4"	ST401
	PF-3	5	3 1/2"x 3/8"x 0'-7"	ST403
CORNER ANGLE ASSEMBLY	AA20R	1	SEE REF. DRWG	ST405

NO	DATE	REVISION	BY
2	9-30-68	AS NOTED.	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

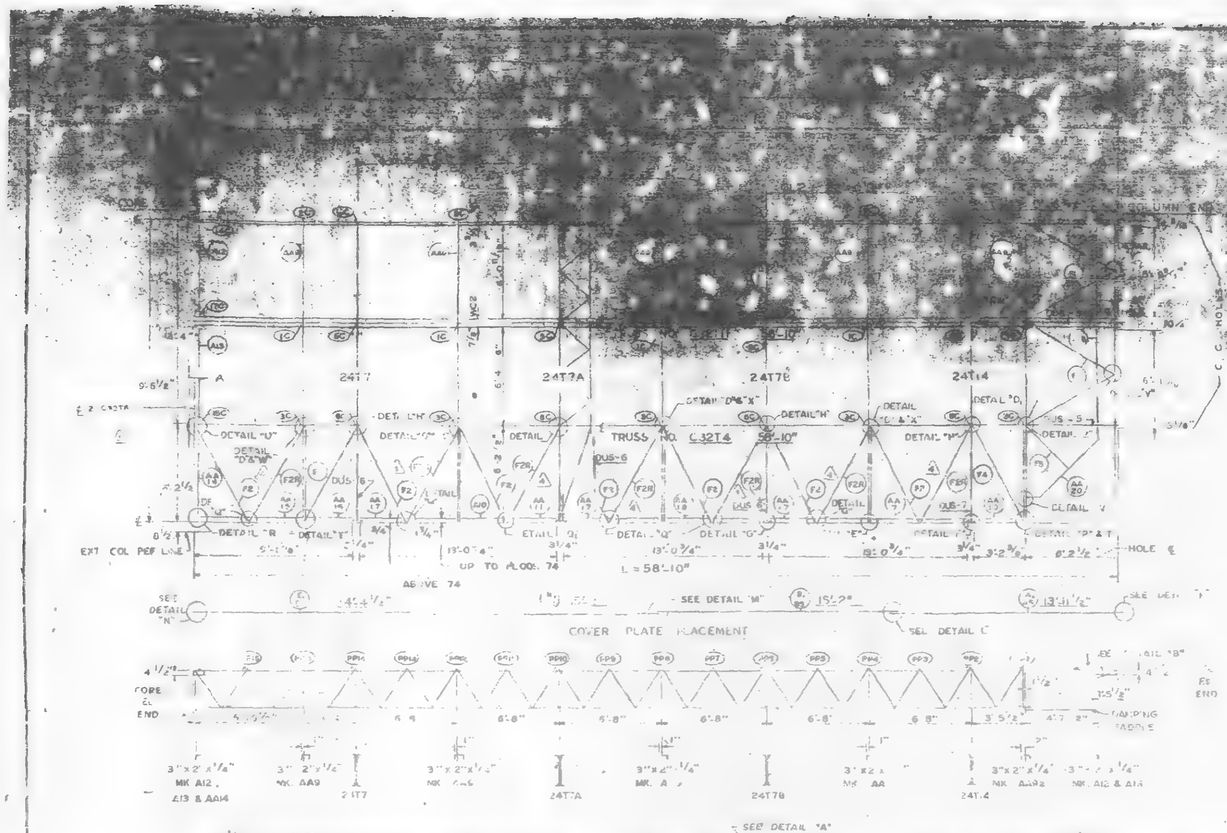
7-A81-8	5-10-68	SA-124	10-20-67
7-A81-9	5-10-68	7-A84-14,14,1	1-3-68
7-A81-10	5-10-68	7-A84-15,16	5-6-68
7-A81-21	1-3-68	7-A84-23-25	4-1-68
7-A82-2	4-4-68	7-A84-23-25	4-1-68
7-A82-9	4-1-68	7-A84-29,38,2	4-1-68
7-A83-2	1-3-68	7-A84-39-41,43	1-3-68
7-A83-13	5-10-68	7-A84-42	4-1-68
7-A84-3,3,1,4	1-3-68	7-A84-45,47,42,1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

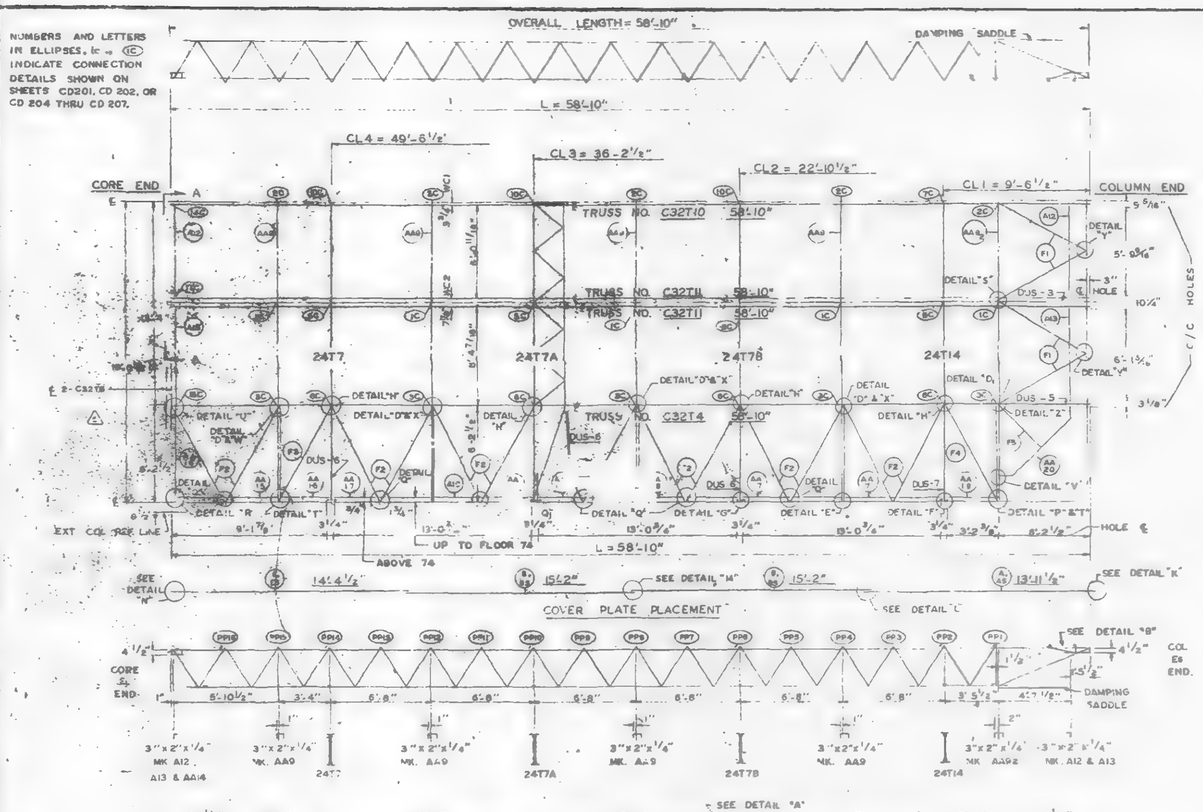
BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 84-91 (NORTH) PANEL FR1 19'-6" x 58'-10"
50-58, 80-91 (SOUTH)

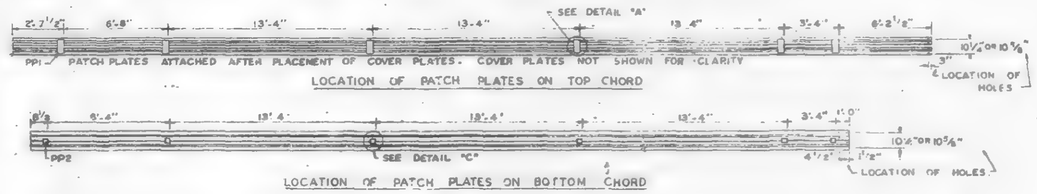
FABRICATION BY: LACLEDE STEEL COMPANY

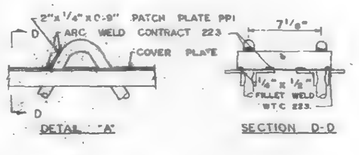
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-14 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE 10/7/68	DRAWN BY: DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD DEV
DETAILED BY: A CARL WEBER LACLEDE STEEL CO.	FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-FR1

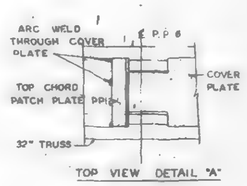

24T7
24T7A
24T7B
24T14
TRUSS NO. C32T4
58'-10"
L = 58'-10"
DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "H"
DETAIL "J"
DETAIL "K"
DETAIL "L"
DETAIL "M"
DETAIL "N"
DETAIL "P"
DETAIL "Q"
DETAIL "R"
DETAIL "S"
DETAIL "T"
DETAIL "U"
COVER PLATE PLACEMENT
SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE DETAIL "M"
SEE DETAIL "N"
EXT COL PER LINE
HOLE ℄
ABOVE 74
UP TO ROOF 74
DUS-6
DUS-7
DUS-5
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATE SOFFIT CHORD
LOCATION OF HOLES
SECTION B-B
SECTION C-C
SECTION F-F
SECTION G-G
SECTION A-A
DETAIL "A"
SECTION D-D
DETAIL "C"
SECTION E-E
DETAIL "B"
DETAIL "J"
TOP VIEW DETAIL "K"
TOP VIEW - DETAIL "B"
SEE DETAIL "A"
SEE DETAIL "B"
ARC WELD CONTRACT 223
COVER PLATE
FILLET WELD WTC 223
ARC WELD THROUGH COVER PLATE
TOP CHORD PATCH PLATE PP2
32" TRUSS
WELD WTC 22336
PATCH PLATE @ PP2
WELD WTC 223.00
SHEAR ANCH.
ANGLE AA7
ANGLE A19
ANGLE A18
ANGLE AA17
ANGLE AA15 OR AA17
ANGLE MK AA9
ANGLE MK AA16 AA18, A7 OR A10
GAP
FILLET WELD WTC 223.00
OTHER SIDE
END SUPPORT ANGLE ATTACHMENT
(TYPICAL ATTACHMENT @ 32" TRUSS)
SEE DETAIL "J"
MK A13
MK AA9
MK AA
MK AA18
MK A18 & A19
MK A12, A13 & AA16
3" x 2" x 1/4" ANGLE
3" x 2" x 5/16" ANGLE
3" x 2" x 3/8" ANGLE
3" x 2" x 1/2" ANGLE
3" x 2" x 1/4" ANGLE
3" x 2" x 1/8" ANGLE
3" x 2" x 1/16" ANGLE
3" x 2" x 3/16" ANGLE
3" x 2" x 1/4" ANGLE
3" x 2" x 1/4" ANGLE
3" x 2" x 1/4

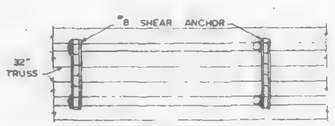
NUMBERS AND LETTERS IN ELLIPSES, ie ⑩ Ⓒ INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202, OR CD 204 THRU CD 207.

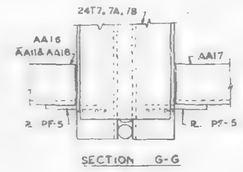


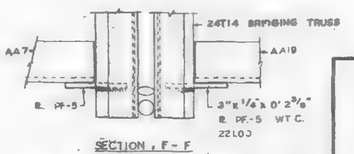


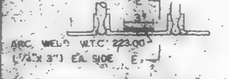


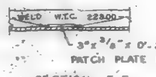


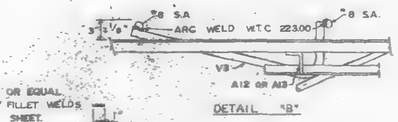


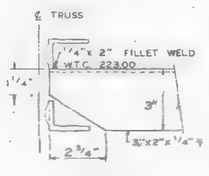


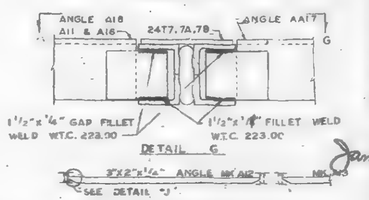




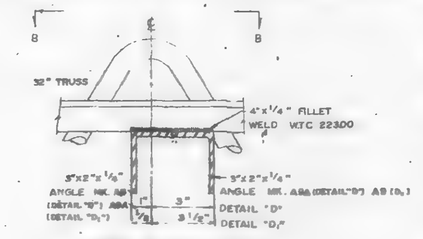


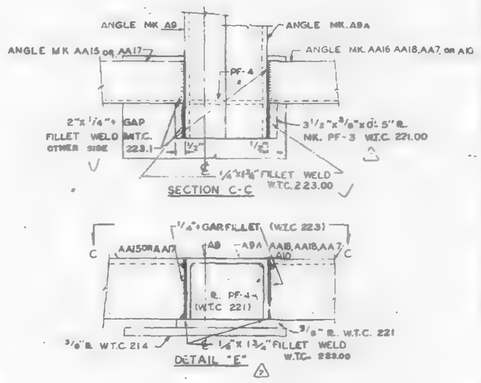


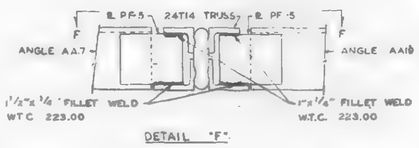




NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN. RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILLET WELDS.
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.







REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T7B	1	24T7B - 19'-6"	ST207B
	T14	1	24T14 - 19'-6"	ST214
3"x2"x 1/4" ANGLES	A10	1	3"x 2"x 1/4" x 2'-7 15/16"	ST404
	A13	2	3"x 2"x 1/4" x 6'-3 7/16"	ST404
	AI2	2	3"x 2"x 1/4" x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF. DRWG.	ST404
	AA9a	1	SEE REF DRWG.	ST404
	AA11	1	SEE REF DRWG.	ST404
	AA14	1	SEE REF. DRWG.	ST404
	AA15	1	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA7	3	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
	F2	14	1 1/2" x 5/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 5/8" x 7'-0"	ST402
	F5	1	1 1/2" x 5/8 x 4'-4"	ST402
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST400
	PP2	5	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST303
	B	2	9" x 0.135" x 15'-2"	ST303
	E	1	9" x 0.135" x 14'-4 1/2"	ST303
	A6	1	8 1/2" x 0.135" x 13'-11 1/2"	ST303
	B6	2	8 1/2" x 0.135" x 15'-2	ST303
	E6	1	8 1/2" x 0.135" x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2" x 1 1/2" x 5/16" x 0'-6"	ST400
3/4" ø SHEAR ANCHOR	SA2	2	3/4" ø REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/16"	ST299
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/16"	ST299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF-7	1	5" x 3/8" x 4"	ST401
	PF-3	5	3 1/2" x 3/8" x 0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST405

NO	DATE	REVISION	BY
2	9-30-68	AS NOTED	T.M.C.
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.			
7-AB1-8	5-10-68	SA-124	10-20-67
7-AB1-9	5-10-68	7-AB4-14,15	1-3-68
7-AB1-10	5-10-68	7-AB4-15,16	5-6-68
7-AB2-2	4-1-68	7-AB4-21	1-3-68
7-AB2-9	4-1-68	7-AB4-23,25	4-1-68
7-AB3-2	1-3-68	7-AB4-29,30,2	4-1-68
7-AB3-13	5-10-68	7-AB4-39-41,43	1-3-68
7-AB4-3,3.1,4	1-3-68	7-AB4-42	4-1-68
		7-AB4-45,47,47.1	4-1-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 72-81 (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 64-81 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-13 5-10-68	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. W.T.C.	DATE 10/7/68	DRAWN BY: B.M.K. DATE JULY 15, 1968	IN CHARGE OF PROD. DEV.
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	
DETAILED BY: A. CARL WERNER LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1

NUMBERS AND LETTERS IN ELLIPSES, 16 & 16G INDICATE CORROSION DETAILS SHOWN ON SHEETS CD 202, CD ED 203 THRU CD 207.

OVERALL LENGTH = 58'-10"

DAMPING SADDLE

L = 58'-10"

CL 4 = 40'-6 1/8"

CL 3 = 36 - 2 1/2"

CL 2 = 22'-10 1/2"

CL 1 = 9'-6 1/2"

CORE END

COLUMN END

TRUSS NO. C32T10 58'-10"

TRUSS NO. C32T11 58'-10"

TRUSS NO. C32T11 58'-10"

TRUSS NO. C32T4 58'-10"

24T7 24T7A 24T8 24T14

DETAIL "U" DETAIL "T" DETAIL "Q" DETAIL "C" DETAIL "E" DETAIL "F" DETAIL "P" & "T" DETAIL "V" DETAIL "Z" DETAIL "S" DETAIL "D" & "X" DETAIL "H" DETAIL "D" & "X" DETAIL "H" DETAIL "D" & "X" DETAIL "H" DETAIL "D" & "X" DETAIL "H"

DUS-3 DUS-5 DUS-6 DUS-7

EST. CONST. ALT. LINE

13'-0 3/4" 13'-0 3/4" 13'-0 3/4" 5'-2 1/2"

UP TO FLOOR 74 ABOVE 74

14'-4 1/2" 15'-2" 15'-2" 13'-11 1/2"

SEE DETAIL "M" SEE DETAIL "K" SEE DETAIL "L"

COVER PLATE PLACEMENT

SEE DETAIL "B"

DAMPING SADDLE

PP16 PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1

5'-10 1/2" 3'-4" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-5 1/2" 4'-1/2"

3" x 2" x 1/4" MK. AA9 24T7 3" x 2" x 1/4" MK. AA9 24T7A 3" x 2" x 1/4" MK. AA9 24T8 3" x 2" x 1/4" MK. AA9 24T14 3" x 2" x 1/4" MK. AA9 2 3" x 2" x 1/4" MK. A12 & A13

MK. A12 A13 & AA14

SEE DETAIL "A"

2'-7 1/2" 8'-8" 13'-4" 13'-4" 13'-4" 6'-2 1/2"

PP1 PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

10 1/4" OR 10 3/8" 3" 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

8 1/2" 9'-4" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

PP2 SEE DETAIL "C"

10 1/4" OR 10 3/8" 4 1/2" 1 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

2 1/4" x 0'-5 1/8" PATCH PLATE PP1 WITH 2 ARC WELDS CONTRACT 223 COVER PLATE

7 1/8"

1/4" x 1/8" FILLET WELD WTC 223.

SECTION D-D

ARC WELD THROUGH COVER PLATE

PP 6 COVER PLATE

TOP CHORD PATCH PLATE PP1

32" TRUSS

TOP VIEW DETAIL "A"

1/2" x 1/8" FILLET WELD WTC 223.00

3" x 3/8" x 0'-3" PATCH PLATE MK PP2

SECTION E-E

ALL WELDS WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL. UNLESS OTHERWISE NOTED ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FILL WELDS FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

B = 1/4"

"8 SHEAR ANCHOR

32" TRUSS

TOP VIEW - DETAIL "B"

"8 S.A.

3/16" P8 S.A. ARC WELD WT.C. 22300

V3

A12 OR A13

DETAIL "B"

24T7, 7A, 7B

AA15 AA16 & AA18

AA17

2 PF-5

SECTION G-G

24T14 BRIDGING TRUSS

AA7

AA19

3" x 1/16" x 0' 2 3/8" @ PF-5 WT.C. 22100

SECTION F-F

℄ TRUSS

1 1/4" x 2" FILLET WELD @ WT.C. 223.00

1 1/4"

3"

2 3/4"

3" x 2" x 1/4" ∠

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT (TYPICAL ATTACHMENT @ 32" TRUSSES)

ANGLE A18 A11 & A18

24T7, 7A, 7B

ANGLE AA17

1 1/2" x 1/16" GAP FILLET WELD WTC. 223.00

1 1/2" x 1/16" FILLET WELD W.T.C. 223.00

DETAIL G

3" x 2" x 1/4" ANGLE MK A12 MK. A13

SEE DETAIL "J"

SECTION A-A END SUPPORT ANGLES

B B

32" TRUSS

4" x 1/4" FILLET WELD WT.C 22300

3" x 2" x 1/4" ANGLE MK A9 (DETAIL "C") A9A (DETAIL "D1")

3" x 2" x 1/4" ANGLE MK. A9a (DETAIL "D") A9 (D_1)

1" 3" 3 1/8"

DETAIL "D" DETAIL "D_1"

DETAIL "D" ("D_1" AS NOTED)

ANGLE A9

32" TRUSS

ANGLE A9A

SECTION B-B

ANGLE MK A9

ANGLE MK A9a

ANGLE MK AA15 OR AA17

ANGLE MK. AA16, AA18, AA7, OR A10

PF-4

2" x 1/4" GAP FILLET WELD WT.C 223 OTHER SIDE

3 1/2" x 3/8" x 0'-5" @ MK. PF-3 WT.C. 221.00

1/4" x 1 3/4" FILLET WELD WT.C. 223.00

SECTION C-C

1/4" GAP FILLET (WT.C 223)

AA15 OR AA17 A9 A9A AA16, AA18, AA7

PF-4 (WT.C 221)

3/8" @ WT.C. 214

3/8" @ WT.C. 221

1/4" x 1 3/4" FILLET WELD WT.C. 230

DETAIL "E"

@ PF-5 24T14 TRUSS @ PF-5

ANGLE AA7

ANGLE AA19

1 1/2" x 1/4" FILLET WELD WTC 223.00

1" x 1/4" FILLET WELD W.T.C. 223.00

DETAIL "F"

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32TN - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 18'-8"	BT207
	T7A	1	24T7A - 19'-8"	BT207A
	T7B	1	24T7B - 19'-8"	BT207B
	T14	1	24T14 - 19'-8"	BT214
3" x 2" x 1/4" ANGLES	A10	1	3" x 2" x 1/4" x 2'-11 15/16"	ST404
	A13	2	3" x 2" x 1/4" x 6'-3 7/16"	ST404
	A12	2	3" x 2" x 1/4" x 5'-11 11/16"	ST404
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST404
	AA9	4	SEE REF DRWG.	ST404
	AA9a	1	SEE REF DRWG.	ST404
	AA11	1	SEE REF DRWG.	ST404
	AA14	1	SEE REF DRWG.	ST404
	AA15	1	SEE REF DRWG.	ST404
	AA16	1	SEE REF DRWG.	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG	ST406
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST402
	F2	14	1 1/2" x 5/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 5/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8" x 7'-0"	ST402
	F5	1	1 1/2" x 5/8" x 4'-4"	ST402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-9"	ST400
	PP2	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST303
	B	2	9" x 0.135" x 15'-2"	ST303
	E	1	9" x 0.135" x 14'-4 1/2"	ST303
	A8	1	3 1/2" x 0.135" x 13'-11 1/2"	ST303
	B8	2	3 1/2" x 0.135" x 15'-2	ST303
	E8	1	3 1/2" x 0.135" - 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2" x 1 1/2" x 1/4" x 0'-8"	ST400
"8 SHEAR ANCHOR	SA2	2	8 REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2" x 1 1/2" x 0'-4"	ST400
	PF-7	4	5" x 3/8" x 4"	ST401
	PF-3	5	3 1/2" x 3/8" x 0'-5"	ST400
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST405

NO	DATE	REVISION	BY
1	9-19-68	GENERAL	T.M.C.

REF. DRWG.

		SA-124	10-20-67
7-AB1-8	5-10-68	7-AB4-14,14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15,16	5-6-68
7-AB1-10	5-10-68	7-AB4-21	1-3-68
7-AB2-2	4-1-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29-38.2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,47,47.1	4-1-68

SCHILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers

415 08 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 72-91 (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 61-91 (NORTH)

FABRICATION BY: LACLEDE STEEL COMPANY

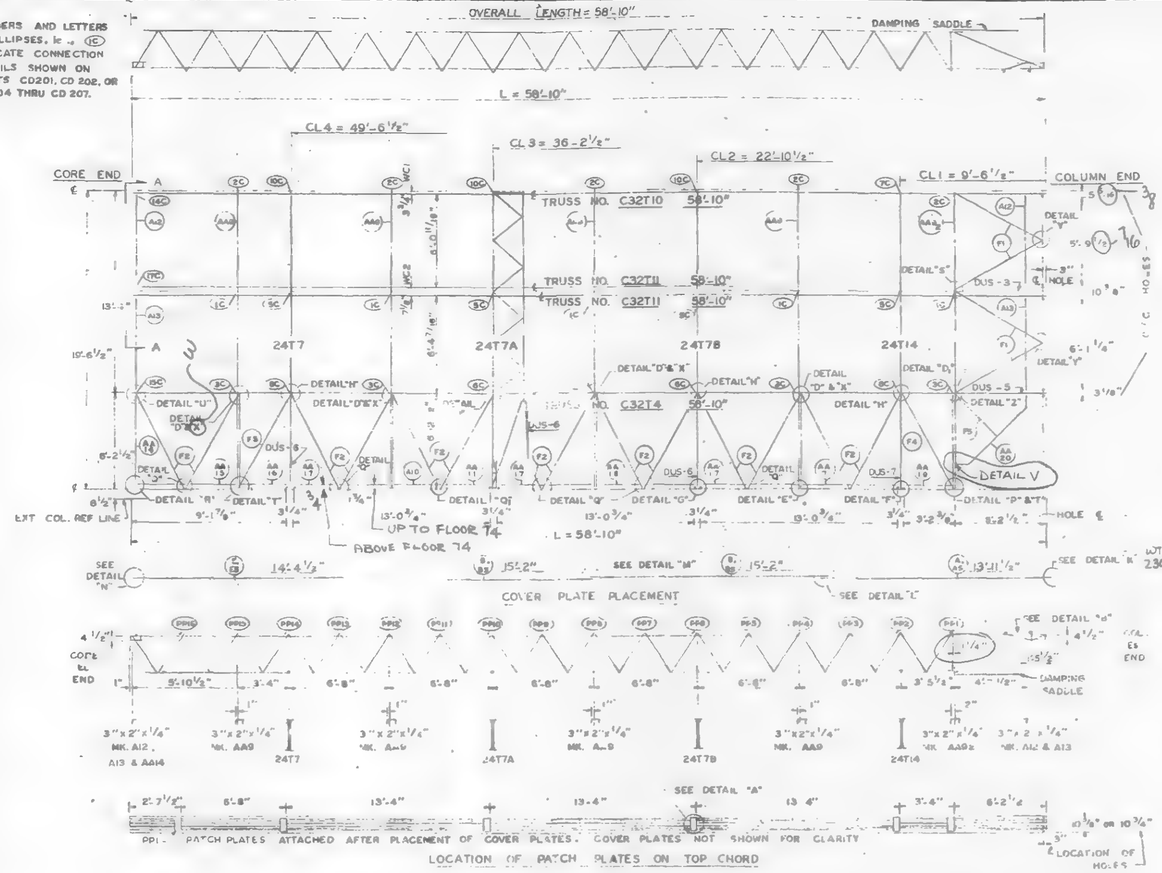
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-13 5-10-68
PLATE

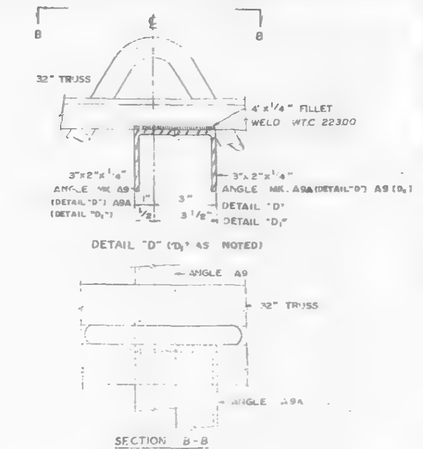
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE
DRAWN BY: DATE JULY 15, 1968

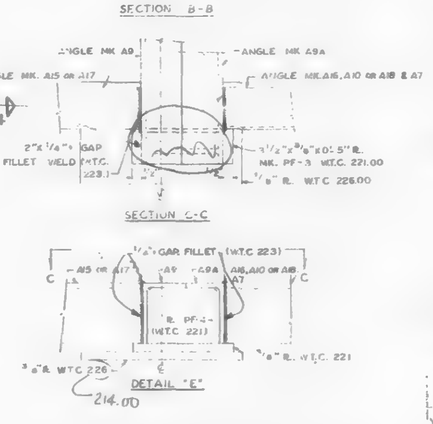
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE
CHECKED BY: T.M.CHURA DATE JULY 16, 1968
IN CHARGE OF PROD. DEV.

DETAILED BY: A. CIVIL WELDER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F1

NUMBERS AND LETTERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD201, CD 202, OR CD 204 THRU CD 207.



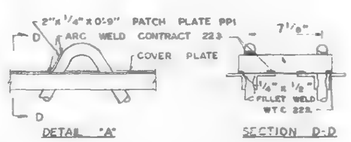


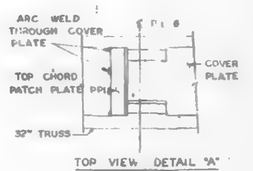


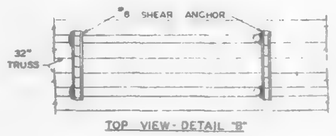
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 - 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-6"	ST207
	T7A	1	24T7A - 19'-6"	ST207A
	T7B	1	24T7B - 19'-6"	ST207B
	T14	1	24T14 - 19'-6"	ST214
3"x2"x 1/4" ANGLES	A10	1	3 x 2" x 1/4" x 2'-7 7/16"	ST404
	A13	2	3" x 2" x 1/4" x 6'-3 7/16"	ST404
	A12	2	3" x 2" x 1/4" x 5'-11 7/8"	ST404
ANGLE ASSEMBLY	A17	1	SEE REF. DRWG.	ST404
	AA2	4	SEE REF. DRWG.	ST404
	AA9	1	SEE REF. DRWG.	ST404
	AA11		SEE REF. DRWG.	ST404
	AA14		SEE REF. DRWG.	ST404
	AA15	1	SEE REF. DRWG.	ST404
	AA16	1	SEE REF. DRWG.	ST404
	AA17	3	SEE REF. DRWG.	ST404
	AA18	1	SEE REF. DRWG.	ST404
	AA19	1	SEE REF. DRWG.	ST404
DIAGONAL FLATS	F1	4	1" x 2" x 5'-8" x 6'-8"	ST402
	F2	14	1 1/2" x 3/8" x 6'-10 1/2"	ST402
	F3	1	1 1/2" x 3/8" x 6'-11 1/4"	ST402
	F4	1	1 1/2" x 3/8" x 7'-0"	ST402
	F5	1	1 1/2" x 3/8" x 4'-6"	ST402
PATCH PLATES	PP1	6	2" x 1/4" x 0'-9"	ST400
	PP2	6	3" x 3/8" x 0'-3"	ST400
COVER PLATES	A	1	9" x 0.135" x 13'-11 1/2"	ST303
	B	2	9" x 0.135" x 15'-2"	ST303
	E	1	9" x 0.135" x 14'-4 1/2"	ST303
	A5	1	3' 2" x 0.135" x 13'-11 1/2"	ST303
	B5	2	3 1/2" x 0.135" x 15'-2"	ST303
	E5	1	3 1/2" x 0.135" x 14'-4 1/2"	ST303
ANGLE CLIPS	C2	16	2 1/2" x 1 1/2" x 1/4" x 0'-6"	ST400
3/4" ø SHEAR ANCHOR	SA2	2	3/4" ø REBAR x 0'-9"	ST400
DAMPING SADDLE	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-5	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST299
	DUS-6	3	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
	DUS-7	1	3 1/2" x 3 1/2" x 3/8" x 4'-4 7/8"	ST299
MISC. PLATES	PF-1	2	1 1/2" x 1/2" x 0'-4"	ST400
	PF-3	4	3 1/2" x 3/8" x 0'-5"	ST400
	PF-4	3	3 1/2" x 1/4" x 0'-2 3/4"	ST400
	PF-5	8	3" x 1/4" x 0'-2 3/8"	ST400
	PF-6	2	2 1/4" x 1/4" x 0'-4 3/8"	ST401
CORNER ANGLE ASSEMBLY	AA20	1	SEE REF DRWG	ST405
	PF7	1	3/4" x 4" x 6"	
	PF8	1	3" x 3/8" x 4"	

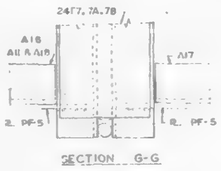
9/1/68 SK

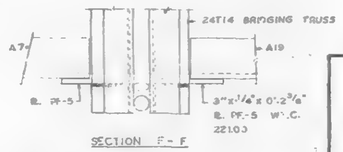
REF. DRWG.		SA-124	10-20-67
7-AB1-8	5-10-68	7-AB4-14,14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15.18	5-8-68
7-AB1-10	5-10-68	7-AB4-21	1-3-68
7-A92-2	4-1-68	7-AB4-23-25	4-1-68
7-A92-9	4-1-68	7-AB4-29-38.2	4-1-68
7-AB3-7	1-3-68	7-AB4-30-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,47,47.1	4-1-68

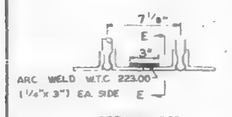


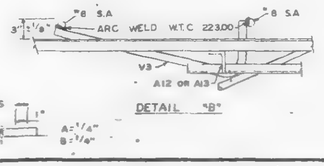


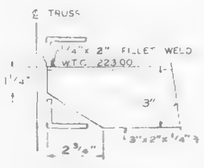


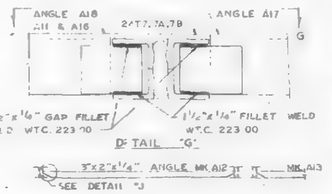












NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ø FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.

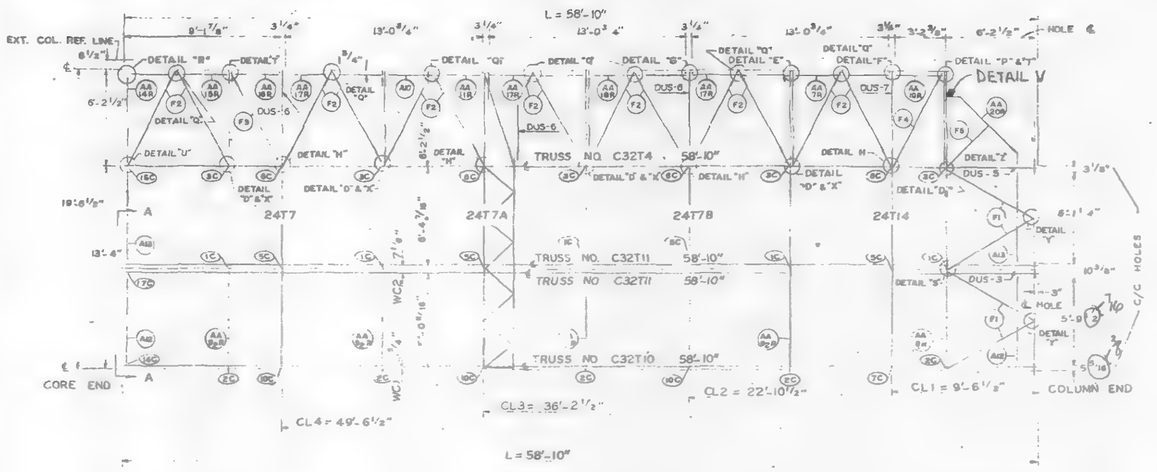
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

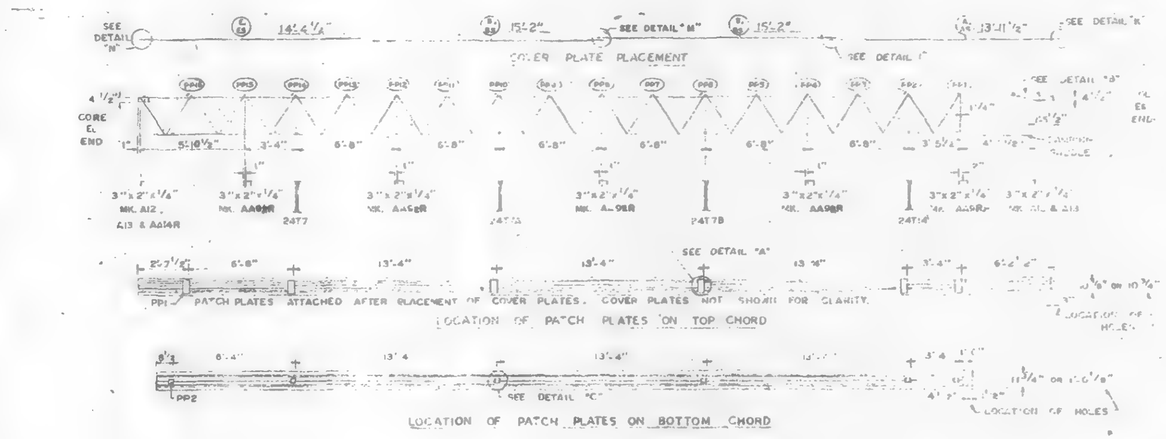
BLDG A FLOORS 10-24 26-40, 60-66, 68-74, 93-106 (NORTH & SOUTH)
50-58, 79 (81) (SOUTH) PANEL F1 19'-6" x 58'-10"
46-58, 84-91 (NORTH)

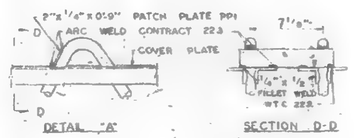
FABRICATION BY: LACLEDE STEEL COMPANY

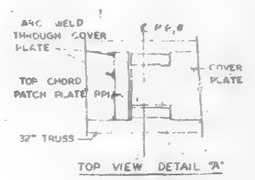
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1

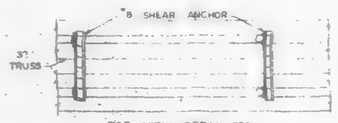
LETTERS & NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie, (1E).
SHOWN ON SHEETS CD 201, CD 202, CD 204 & CD 205 THRU CD 207.

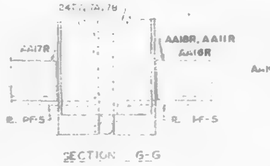


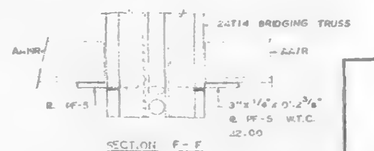


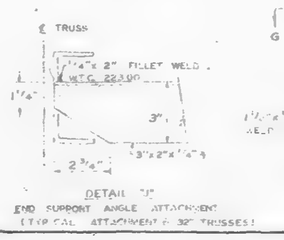


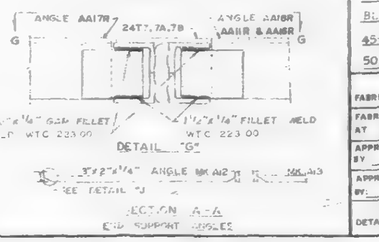




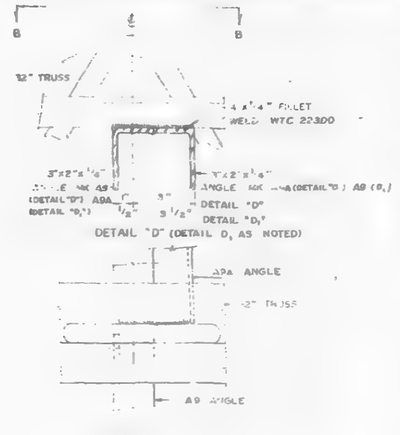








NOTE. 1. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FILLET WELDS
3. SEE SHEET FP-F1-2 FOR DETAILS CALLED FOR BUT NOT SHOWN ON THIS SHEET.



REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T10	1	C32T10 - 58'-10"	ST210
	T11	2	C32T11 - 58'-10"	ST211
	T4	1	C32T4 58'-10"	ST204
BRIDGING TRUSSES	T7	1	24T7 - 19'-8"	ST207
	T7A	1	24T7A - 19'-8"	ST207A
	T7B	1	24T7B - 19'-8"	ST207B
	T14	1	24T14 -19'-8"	ST214
3"x2"x1/4" ANGLES	A2	1	3"x2"x1/4"x 2'-10"	ST404
	A3	2	3"x2"x1/4"x6'-3 3/16"	ST404
	A9	2	3"x2"x1/4"x5'-11 5/16"	ST404
ANGLE ASSEMBLY	AA7R	1	SEE REF DRWG	ST406
	AA8R	1	SEE REF DRWG.	ST406
	AA9R	4	SEE REF DRWG	ST406
	AA10R	1	SEE REF DRWG	ST406
	AA11R	1	SEE REF DRWG	ST406
	AA5R	1	SEE REF DRWG	ST406
	AA7R	3	SEE REF DRWG	ST406
	AA8R	1	SEE REF DRWG	ST406
	AA9R	1	SEE REF DRWG	ST406
DIAGONAL PLATES	F1	6	1'-2"x 8"x 6'-8"	ST402
	F2	14	1'-2"x 8"x 6'-11 1/4"	ST402
	F3	1	1'-2"x 8"x 6'-11 1/4"	ST402
	F4	1	1/2"x 3/4"x 7'-0"	ST402
	F5	1	1 1/2"x 3/4"x 4'-4"	ST402
PATCH PLATES	PP1	6	2"x1/4"x 0'-9"	ST400
	PP2	6	3"x3/8"x 0'-3"	ST400
COVER PLATES	A	1	9"x 0.135"x 13'-11 1/2"	ST303
	B	2	8"x 0.135"x 15'-2"	ST303
	E	1	8"x 0.135"x 14'-4 1/2"	ST303
	A5	1	3 1/2"x 0.135"x 13'-11 1/2"	ST303
	B5	2	3 1/2"x 0.135"x 15'-2"	ST303
	E5	1	3 1/2"x 0.135"x 14'-4 1/2"	ST303
ANGLE CLIPS	L2	16	2 1/2"x1 1/4"x1/4"x0'-6"	ST400
"U" SHEAR ANCHOR	SA2	2	3/4" HEBAR x 0'-9"	ST400
CAMBER RADIUS	C-1	1	3'-8"x 3'-1"x 3"x 1'-6"x 8"	ST294
	C-2	1	3'-8"x 3'-1"x 3"x 3'-6"	ST299
	C-3-5	3	3'-8"x 3'-1"x 3"x 4'-4"	ST299
	C-6	1	3'-8"x 3'-1"x 3"x 4'-8"	ST299
NOSE PLATES	PF-1	2	1'-2"x 1'-4"x 0'-4"	ST400
	PF-3	5	3'-2"x 8"x 0'-4"	ST400
	PF-4	5	13'-2"x 4"x 0'-2 1/4"	ST400
	PF-5	8	13'-2"x 4"x 0'-2 1/4"	ST400
	PF-6	2	2'-4"x 4"x 0'-4 1/2"	ST401
CORNER ANGLE ASSEMBLY	AA7R	1	SEE REF. DRWG	ST405
	PF7	1	2'4x4x6	
	PF8	1	3x3/8x4	

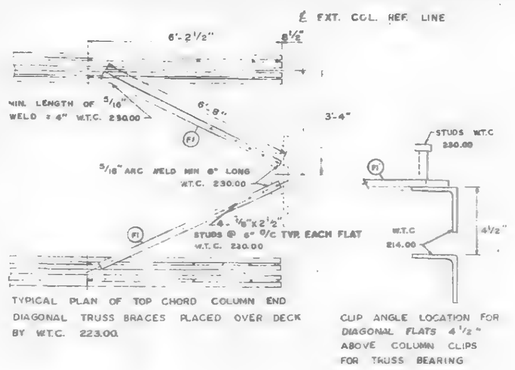
REF DRAWING		SA-124	
7-AB1-8	5-10-68	7-AB4-14,14.1	1-3-68
7-AB1-9	5-10-68	7-AB4-15,16	5-8-68
7-AB1-10	5-10-68	7-AB4-21	4-1-68
7-AB2-2	4-1-68	7-AB4-23-25	4-1-68
7-AB2-9	4-1-68	7-AB4-29,36.2	4-1-68
7-AB3-2	1-3-68	7-AB4-39-41,43	1-3-68
7-AB3-13	5-10-68	7-AB4-42	4-1-68
7-AB4-3,3.1,4	1-3-68	7-AB4-45,46,47.1	4-1-68

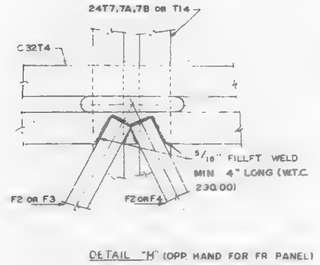
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 60-66, 68-74, 93-100 (NORTH & SOUTH)
45-58, 94-CI (NORTH) PANEL FRI 15'-6" x 58'-10"
50-58, 80-91 (SOUTH)

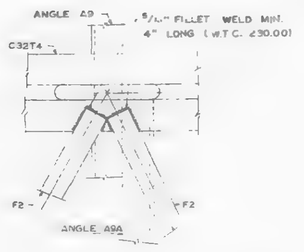
FABRICATION BY: LACLEDE STEEL COMPANY

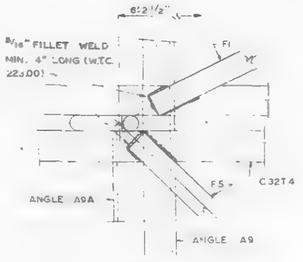
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-14 5-10-66	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY O.R. DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE JULY 16, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP - FRI



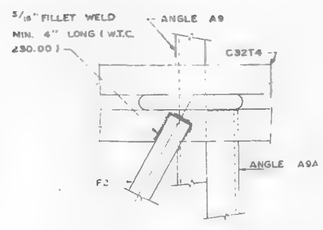


DETAIL "H" (OPP. HAND FOR FR PANEL)

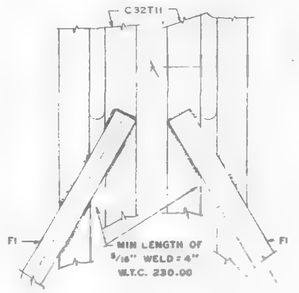




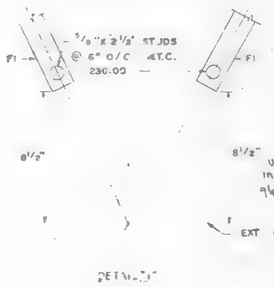
DETAIL "Z" (OPP. HAND FOR FR PANEL)



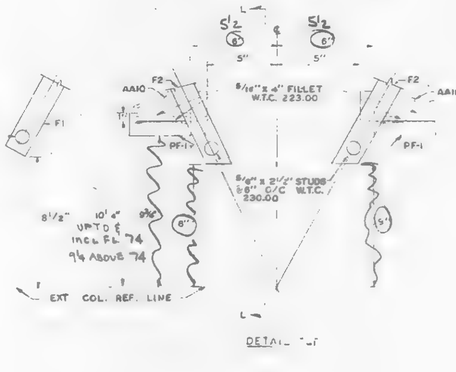
DETAIL "W" (OPP. HAND FOR FR PANEL)



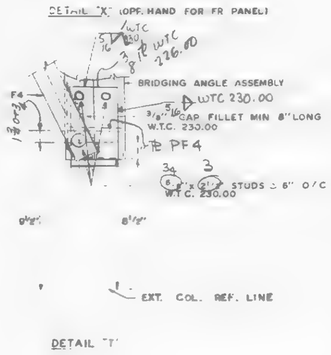
DETAIL "S"



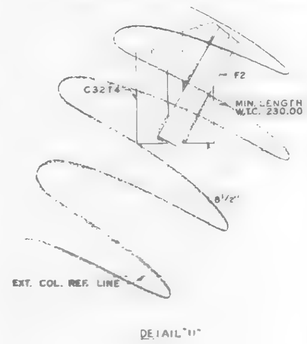
DETAIL "J"



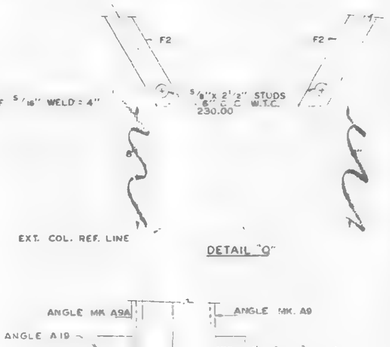
DETAIL "T"



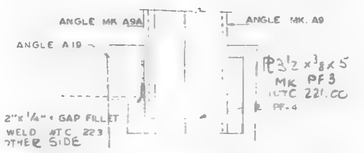
DETAIL "X"



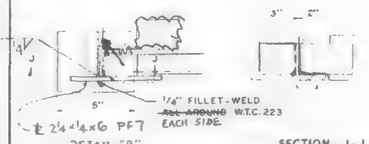
DETAIL "U"



DETAIL "O"



SECTION H-H (OPP HAND FOR FR PANEL)



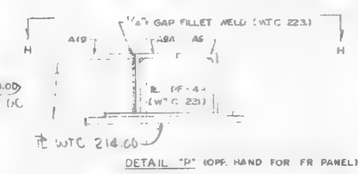
DETAIL "R"

SECTION J-J

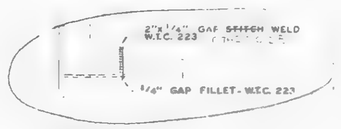
DETAIL "V"

DETAIL "J"

SECTION L-L



DETAIL "P" (OPP. HAND FOR FR PANEL)



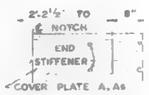
SECTION K-K

DETAIL "M"

DETAIL "L"

COVER PLATES "29 GA. THICK

DETAIL "N"



DETAIL "K"

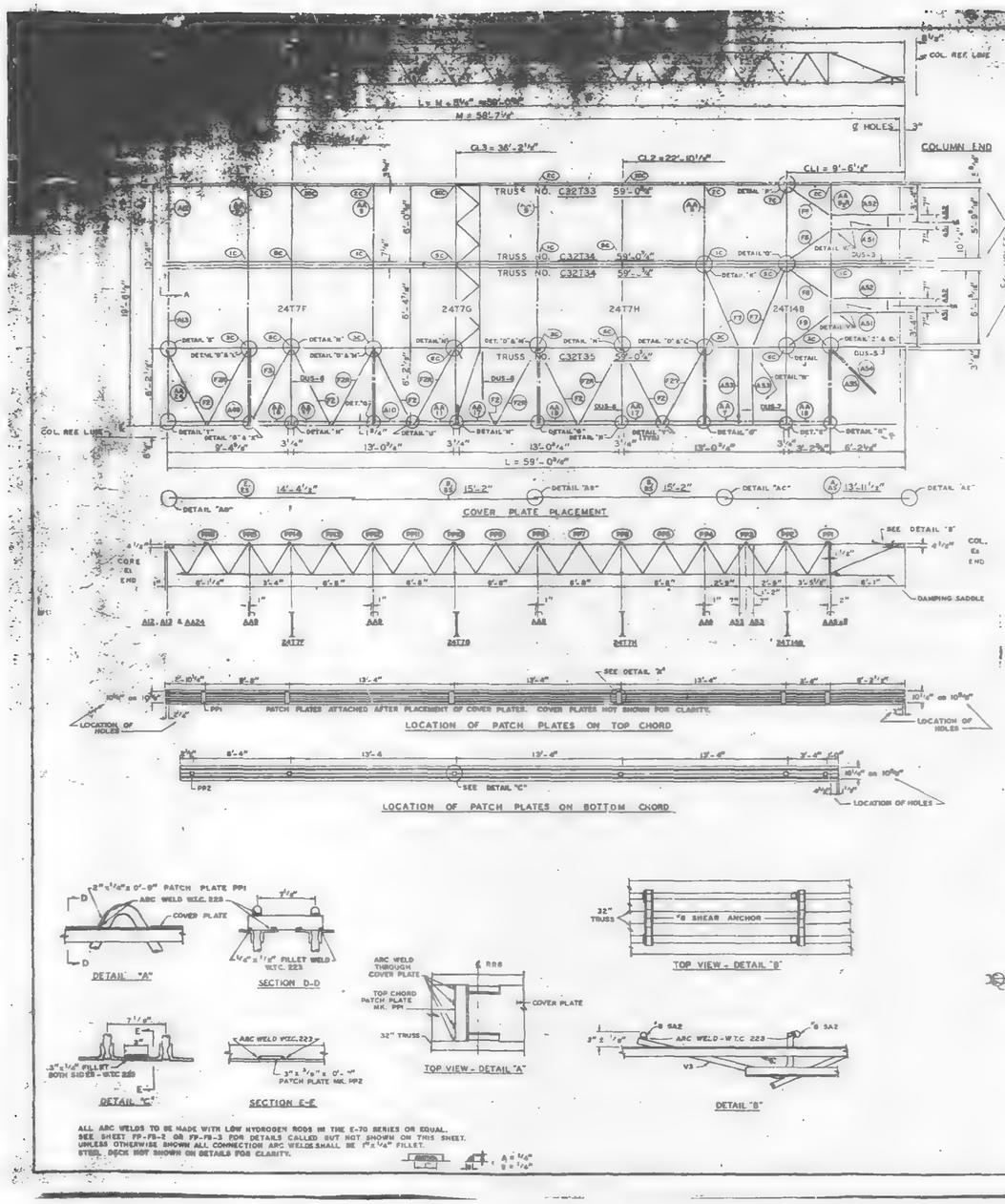
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

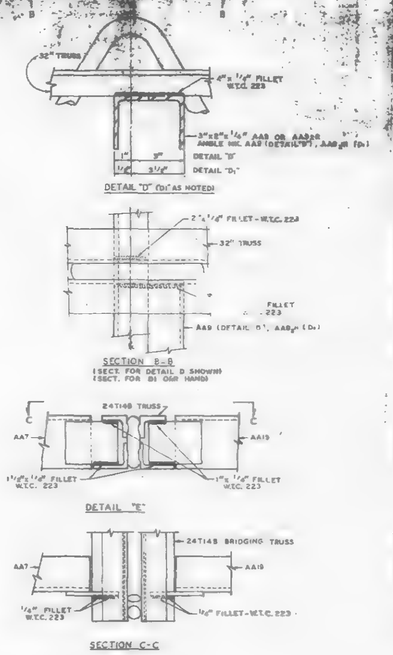
TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

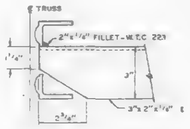
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-582-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY D.B. DATE JULY 15, 1968	
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE JULY 16 1968	IN CHARGE OF PROJ DEV
DETAILED BY A CARL WEBER		FABRICATION CONT NO W.T.C 221	SHEET NO FR - F1-2





3"x2"x¼" ANGLES	A51	1	3"x2"x¼"x 1'-4½"	ST 433
	A54	1	3"x2"x¼"x 1'-4½"	ST 433
	A53	2	3"x2"x¼"x 1'-4½"	ST 433
	A54	1	3"x2"x¼"x 1'-4½"	ST 433
	A55	1	3"x2"x¼"x 1'-4½"	ST 433
ANGLE ASSEMBLY	AA7	1	SEE REF. DRWG.	ST 433
	AA8	4	SEE REF. DRWG.	ST 404
	AA8₂B	1	SEE REF. DRWG.	ST 404
	AA11	1	SEE REF. DRWG.	ST 404
	AA16	1	SEE REF. DRWG.	ST -14
	AA17	3	SEE REF. DRWG.	ST 404
	AA18	1	SEE REF. DRWG.	ST 404
	AA19	1	SEE REF. DRWG.	ST 404
	AA24	1	SEE REF. DRWG.	ST 412
DIAGONAL FLATS	F2	8	1'-2"±⅜"x 8'-10⅝"	ST 402
	F2E	8	1'-2"±⅜"x 8'-10⅝"	ST 402
	F3	1	1'-2"±⅜"x 6'-11½"	ST 402
	F8	3	1'-2"±⅜"x 6'-2⅜"	ST 413
	F7	2	1'-2"±⅜"x 3'-0"	ST 413
	F8	1	1'-2"±⅜"x 4'-6⅛"	ST 413
PATCH PLATES	PP1	6	2"±1/4"x 0'-8"	ST 400
	PP2	6	3"±⅜"x 0'-3"	ST 400
COVER PLATES	A	1	9"±.0135"x 13'-10⅝"	ST 303
	B	2	9"±.0135"x 11'-2"	ST 303
	E	1	9"±.0135"x 14'-4½"	ST 303
	As	1	3½"±.0135"x 13'-8¼"	ST 303
	Bs	2	3½"±.0135"x 11'-2"	ST 303
	Es	1	3½"±.0135"x 14'-4½"	ST 303
ANGLE CLIPS	C1	8	2"x1½"x¼"x 0'-8"	ST 400
	C2	7	2½"x1½"x¼"x 0'-8"	ST 400
	C3	1	3"x 2"x .237"x 0'-3"	ST 418
DAMPING SADDLE	DUS-1	1	3⅜"x 7½"x ¼"x 3'-6⅜"	ST 298
	DUS-3	1	3½"x 3½"x ⅜"x 3'-6⅜"	ST 298
	DUS-5	3	3½"x 3½"x ⅜"x 4'-6⅜"	ST 298
	DUS-7	1	3½"x 3½"x ⅜"x 4'-6⅜"	ST 298
MISC. PLATES	PF-1	2	1'-½"x 1'-½"x ½" 0'-4"	ST 400
	PF-3	5	3½"x 3½"x ⅜" 0'-5"	ST 400
	PF-12	2	6'-½"x 1'-½"x ½" 0'-0"	ST 418
	PF-13	2	1'-11⅛"x ½" 2'-0"	ST 418
	PF-14	2	8'-3⅛"x ¼" 0'-7"	ST 418
	PF-15	2	1'-½"x 1'-½"x ½" 0'-2"	ST 418
	PF-16	2	8'-6"x 1'-½"x ½" 0'-2"	ST 418
	PF-17	2	2'-8"x 1'-½"x 3'-½"	ST 418
	PF-18	3	2"x 1'-½"x ½" 1'-1⅜"	ST 418
⅞" B SHEAR ANCHOR	SA2	2	⅞" B STUD x 0'-8"	ST 400

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 204 & CD 229, W.T.C.



ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
SEE SHEET FP-FB-2 OR FP-FB-3 FOR DETAILS CALLED OUT BUT NOT SHOWN ON THIS SHEET.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 5/16" FILLET.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH)

PANEL FB 19'-6" x 59'-0⅜"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DES. DRWG. BY: 7-A82-82 | PLATE 1

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 3/24/69

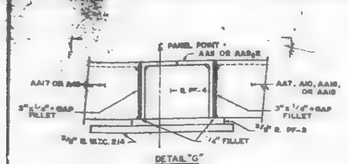
DRAWN BY: DATE FEB. 7, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

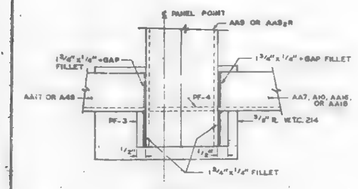
CHECKED BY: T.H.CHURA DATE FEB. 7, 1969 | IN CHARGE OF PROD. DEV.

DETAILED BY: A. CARL WEBER

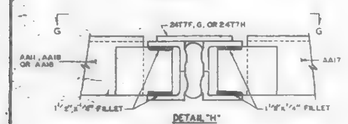
FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. FP-FB



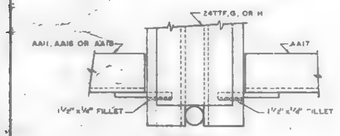
DETAIL "G"



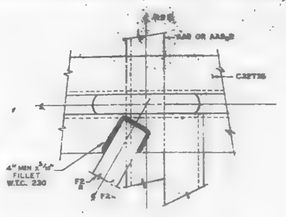
SECTION F-F



DETAIL "H"



SECTION G-G



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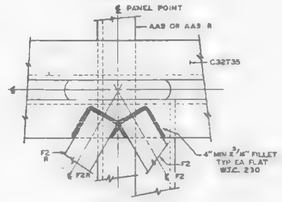
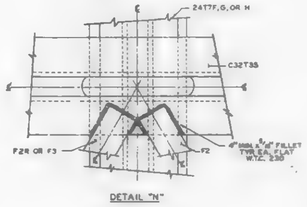


DETAIL "M"



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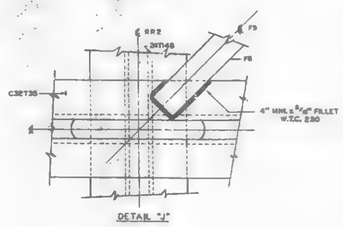

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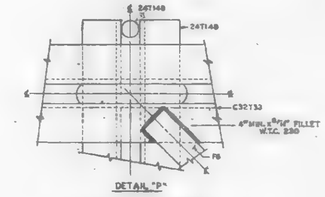

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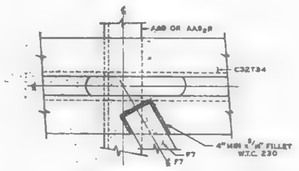

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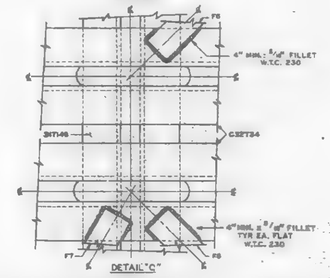
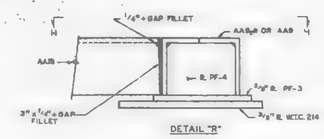


DETAIL "C"



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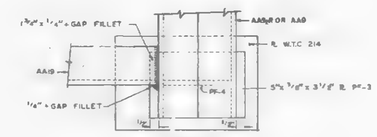
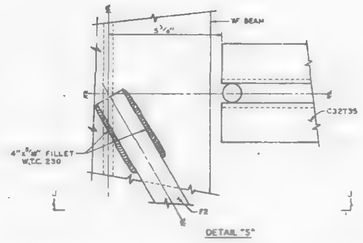
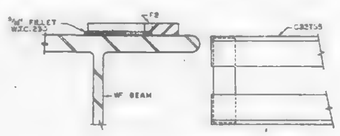


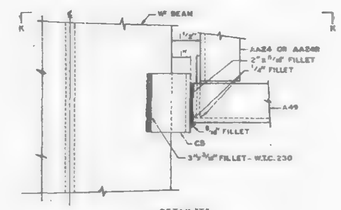
SECTION H-H



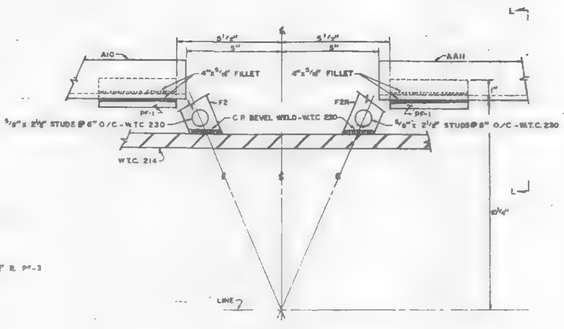
DETAIL "S"

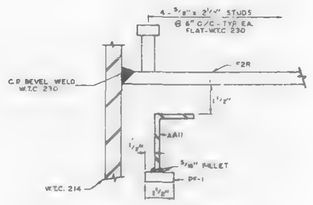


SECTION J-J

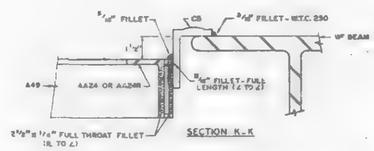


DETAIL "T"





SECTION L-L



SECTION K-K

ALL DETAILS ON THIS SHEET ARE DRAWN FOR PANEL FB. ALL DETAILS MAY BE USED FOR PANEL FRB IF USED OPPOSITE HAND.

UNLESS OTHERWISE NOTED ALL WELDS ARE TO BE MADE BY W.T.C. 223.

STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

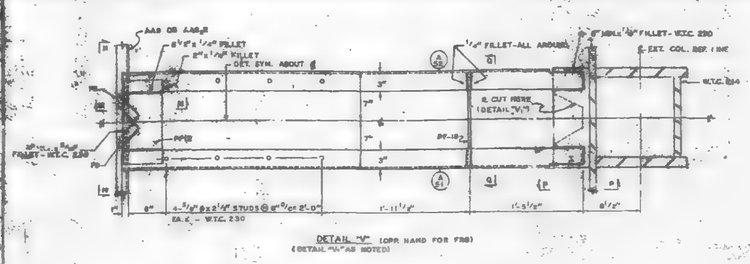
ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
THE PORT OF NEW YORK AUTHORITY

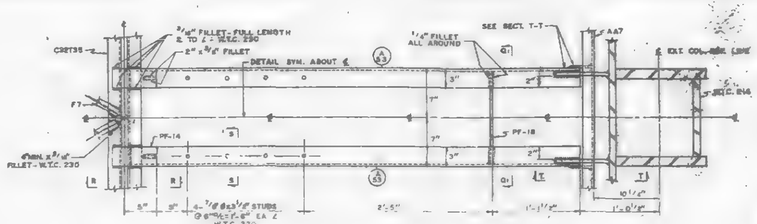
FLOOR PANEL DETAILS FOR PANELS FB & FRB

FABRICATION BY: LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 33-83 & 83	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.N.J. BY:	DATE 3/24/69	DRAWN BY: [illegible] DATE FEB. 7, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: I.M. CHUBU DATE FEB. 7, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-FB-2

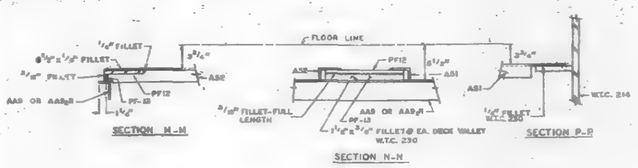
NO.	DATE	REVISION	BY



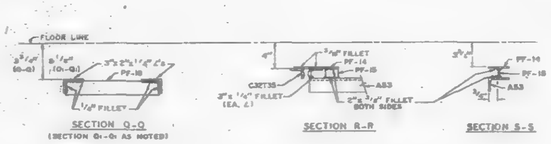
DETAIL "U" (OPP HAND FOR FB8)
(DETAIL "A" AS NOTED)



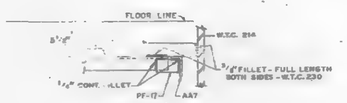
DETAIL "W"



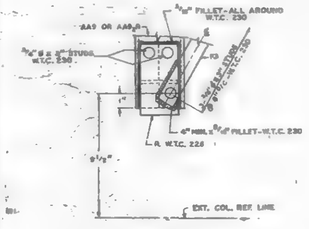
SECTION M-M
SECTION N-N
SECTION P-P



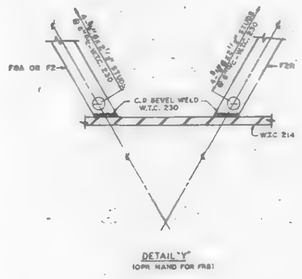
SECTION Q-Q
(SECTION Q-Q AS NOTED)
SECTION R-R
SECTION S-S



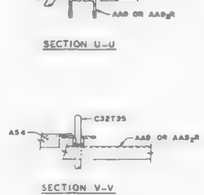
SECTION T-T



DETAIL "R"
(OPP HAND FOR FB8)

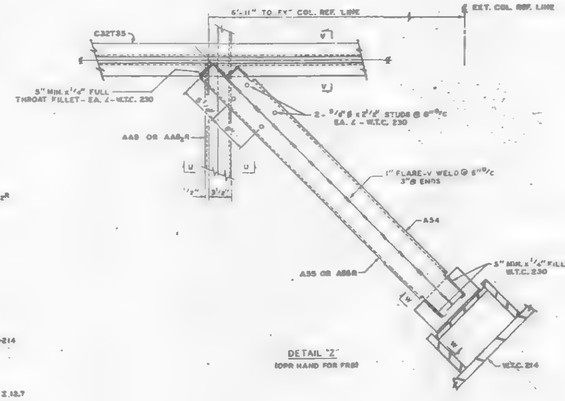


DETAIL "Y"
(OPP HAND FOR FB8)

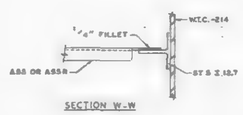


SECTION U-U

SECTION V-V

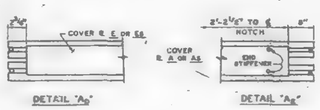


DETAIL "Z"
(OPP HAND FOR FB8)



SECTION W-W

DETAIL "AB"
DETAIL "AC"



DETAIL "AD"
DETAIL "AE"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS OTHERWISE NOTED ALL ARC WELDS BY W.T.C. 223.
STEEL DECK NOT SHOWN ON DETAILS FOR CLARITY.

REF. DRWG.

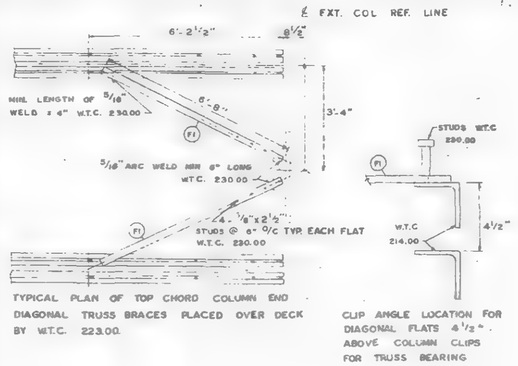
7-AB8-32	1-20-69	7-AB4-48.1	11-25-68
7-AB3-83	1-20-68	7-AB4-21	1-6-69
8A-124	1-6-69	7-AB4-22	1-6-69
7-AB1-80	1-6-69	7-AB4-22.1	7-22-69
7-AB1-81	1-6-69	7-AB4-23	7-22-69
7-AB1-28	1-6-69	7-AB4-24	10-15-69
7-AB2-16	1-6-69	7-AB4-26	7-22-69
7-AB2-8	1-6-69		
7-AB4-31	1-20-69		
7-AB4-34.1	1-20-69		
7-AE4-38.3	1-20-69		

NO.	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

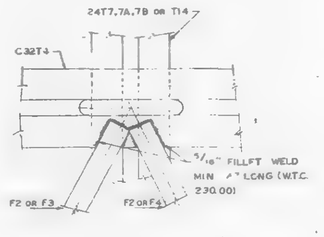
FLOOR PANEL DETAILS FOR PANELS FB & FB8.

FABRICATION BY: LACLEDE STEEL "ARMY"
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION FOR P.O.N.Y.-N.J. BY [signature] DATE 3/24/69
APPROVED FOR FABRICATION FOR FABRICATOR BY ____ DATE ____
DESIGN CRITERIA NO. 7-AB3-82 & 83 PLATE ____
DRAWN BY: A.G. DATE FEB. 7 1969
CHECKED BY: T.H. CHIURA DATE FEB. 7, 1969
IN CHARGE OF PROJ. DEV.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-F8-3
LACLEDE STEEL CO.
DETAILED BY: A. GAIL WEBER

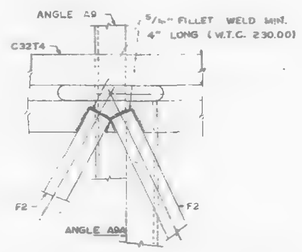


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

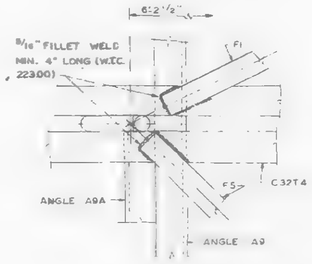
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



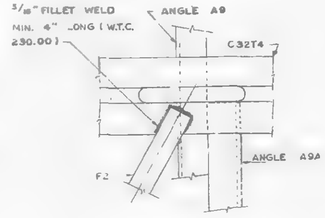
DETAIL "H" (OPP. HAND FOR FR PANEL)



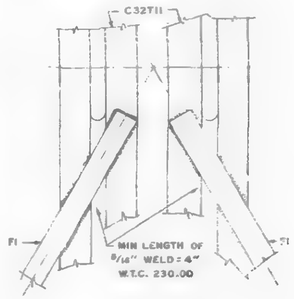
DETAIL "X" (OPP. HAND FOR "R PANEL)



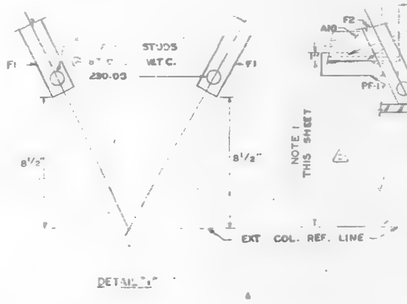
DETAIL "Z" (OPP. HAND FOR FR PANEL)



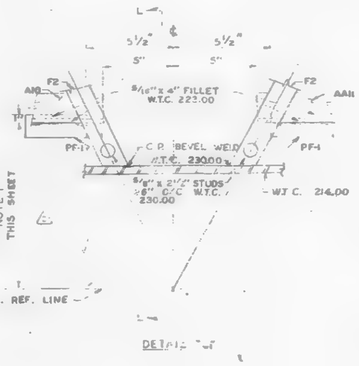
DETAIL "W" (OPP. HAND FOR FR PANEL)



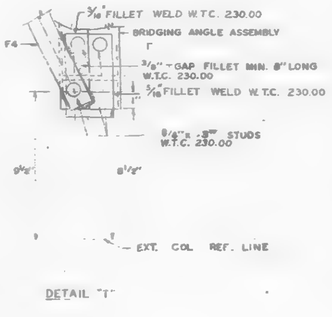
DETAIL "S"



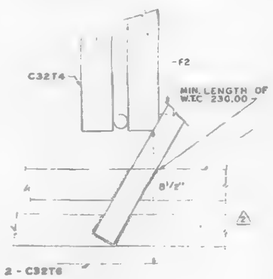
DETAIL "J"



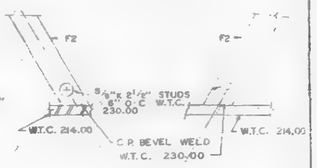
DETAIL "J"



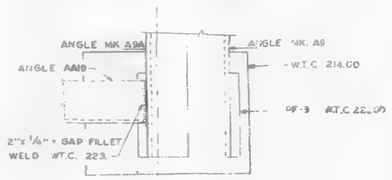
DETAIL "T"



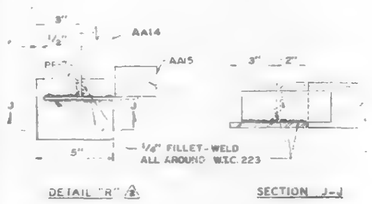
DETAIL "U"



DETAIL "Q"

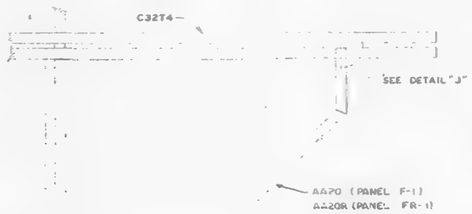


SECTION H-H (OPP. HAND FOR FR PANEL)

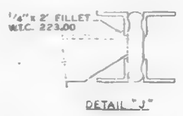


DETAIL "R" ⚠2

SECTION J-J

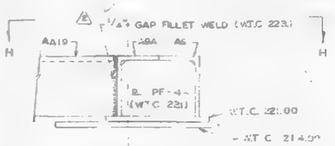


DETAIL "V"

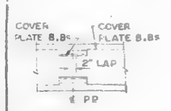


DETAIL "J"

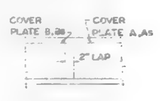
SECTION L-L



DETAIL "P" (OPP. HAND FOR FR PANEL)



DETAIL "M"



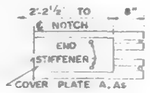
DETAIL "L"

COVER PLATES #20 GA. THICK

TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (FI) AND AA20R (FRI - OPP HAND)

SECTION K-K

DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 223.00

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74.

NO.	DATE	REVISION	BY
2	9-30-68	AS NOTED	T.M.C
1	9-20-68	GENERAL	T.M.C.

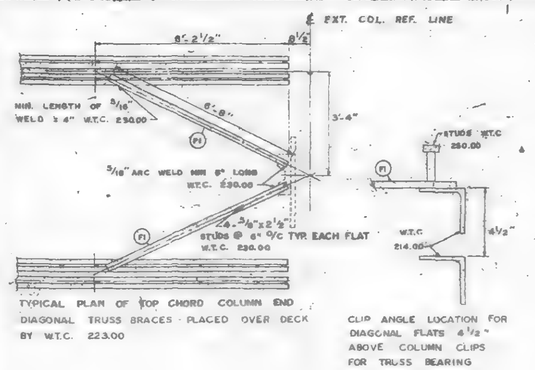
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR FI & FR PANELS

FABRICATION BY: LACLEDE STEEL COMPANY

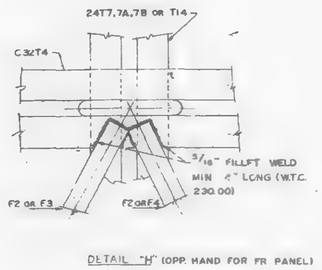
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-13 5-10-68
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 10/7/68	DRAWN BY: DWB DATE JULY 15, 1968
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JULY 16 1968
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221

PLATE

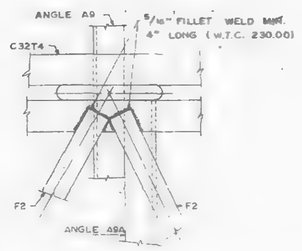


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES - PLACED OVER DECK BY W.T.C. 223.00

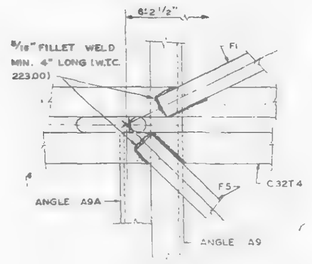
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



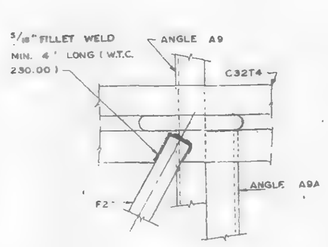
DETAIL "H" (OPP. HAND FOR FR PANEL)



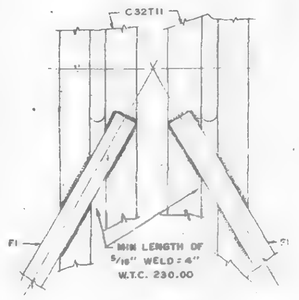
DETAIL "X" (OPP. HAND FOR FR PANEL)



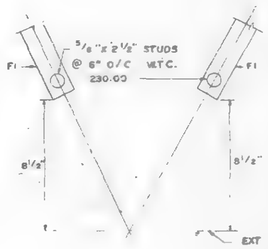
DETAIL "Z" (OPP. HAND FOR FR PANEL)



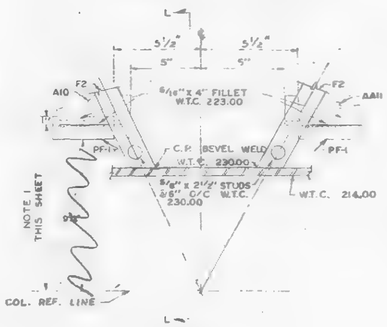
DETAIL "W" (OPP. HAND FOR FR PANEL)



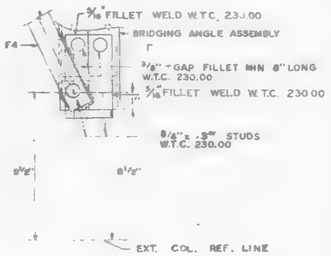
DETAIL "S"



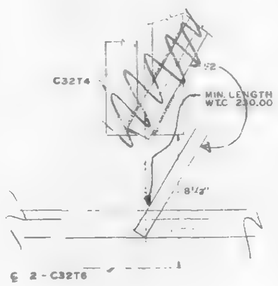
DETAIL "I"



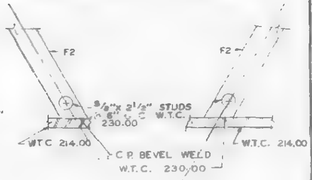
DETAIL "W"



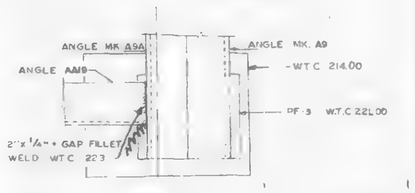
DETAIL T



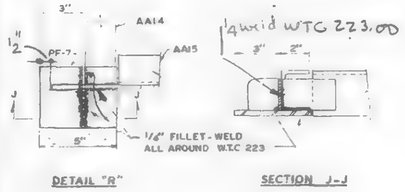
DETAIL "U"



DETAIL "Q"

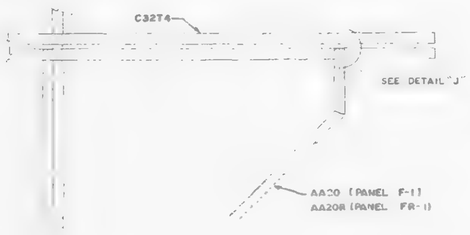


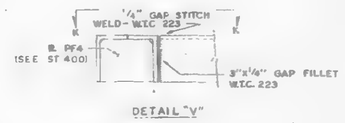
SECTION H-H (OPP. HAND FOR FR PANEL)



DETAIL "R"

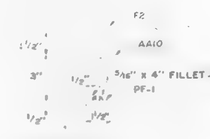
SECTION J-J



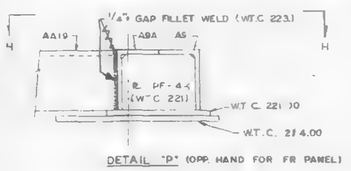


DETAIL "V"

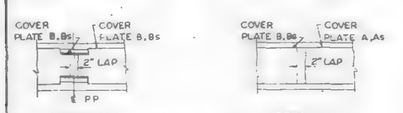
DETAIL "J"



SECTION L-L



DETAIL "P" (OPP. HAND FOR FR PANEL)

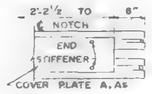


DETAIL "M"

DETAIL "L"

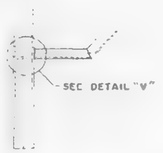
COVER PLATES #20 GA THICK

DETAIL "N"

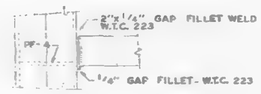


DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300



TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F1) AND AA20R (FR1 - OPP HAND)



SECTION K-K

NOTE
1. DIMENSION IS 10 3/4" UP TO & INCL. FLOOR 74 AND IS 9 1/4" ABOVE FLOOR 74.

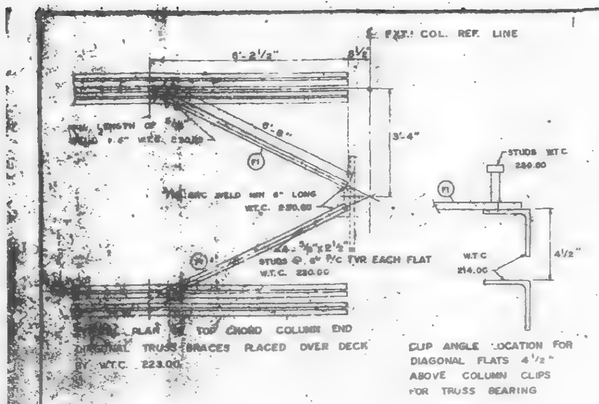
NO.	DATE	REVISION	BY
1	9-20-68	GENERAL	TMC

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F1 & FR PANELS

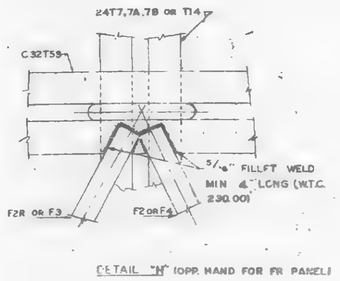
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-13 5-10-68	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A. DATE	DRAWN BY: DWB DATE JULY 15, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE	CHECKED BY: T.M.CHURA DATE JULY 15 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-F1-2

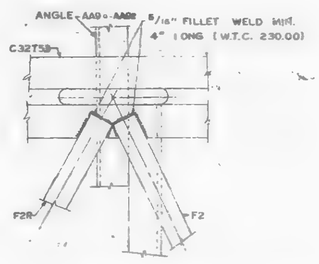


PLAN AT TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK W.T.C. 223.00

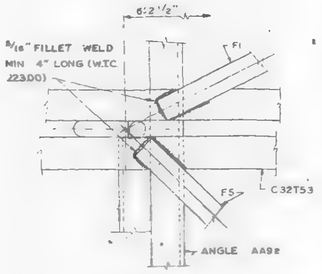
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING



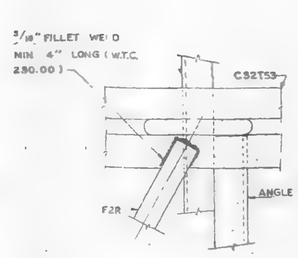
DETAIL "M" (OPP HAND FOR FR PANEL)



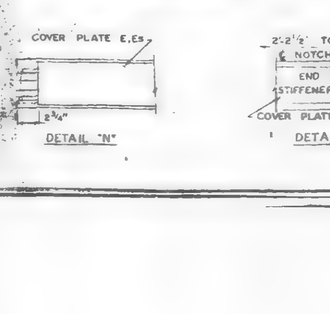
DETAIL "X" (OPP HAND FOR FR PANEL)



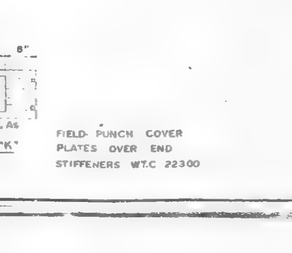
DETAIL "Z" (OPP HAND FOR FR PANEL)



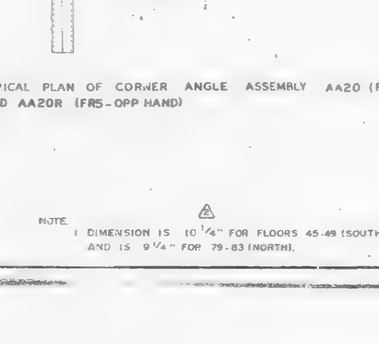
DETAIL "W" (OPP HAND FOR FR PANEL)



DETAIL "S"

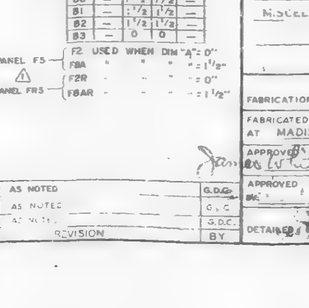


DETAIL "Y"

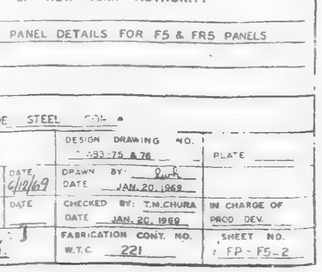


DETAIL "Z"

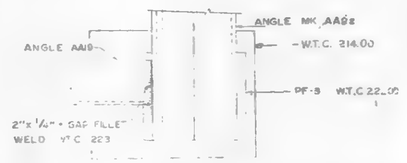
DETAIL "T"



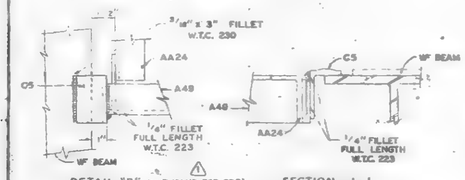
DETAIL "U"



DETAIL "Q"



SECTION H-H (OPP HAND FOR FR PANEL)

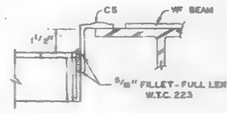


DETAIL "R" (OPP HAND FOR FR5)

WELDS NOT IDENTIFIED IN DETAIL R ARE IDENTIFIED IN SECTION J-J.

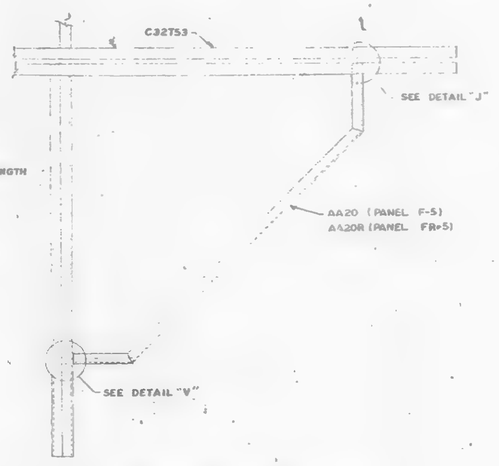
SECTION J-J

3"x 3"x 5/16" DECK BEAMS TOP ELEVATION SAME AS TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "1A" = 1 1/2")



SECTION J-J

3"x 2 1/2" x 1/4" DECK BEAMS TOP ELEVATION BELOW TOP ELEVATION WF BEAM. (WHEN DIM. IN TABLE "1A" = 0")

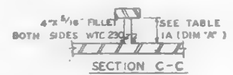


TYPICAL PLAN OF CORNER ANGLE ASSEMBLY AA20 (F5) AND AA20R (FR5 - OPP HAND)

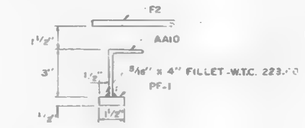
DETAIL "V"

DETAIL "J"

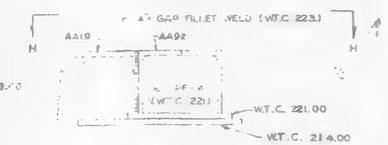
SECTION K-K



SECTION C-C



SECTION L-L

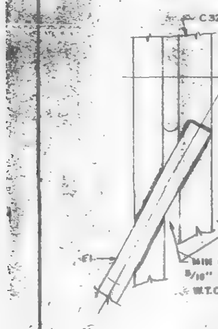


DETAIL "T" (OPP HAND FOR FR PANEL)

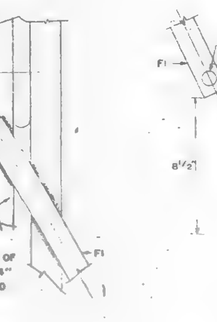
TABLE "1A"				
	DIM "A" @ COL LINE			
FL	417	443	217	243
45	1 1/2"	-	0	0
45	1 1/2	—	—	1 1/2
47	1 1/2	—	—	1 1/2
48	1 1/2	—	—	1 1/2
49	0	—	—	0
79	—	1 1/2	0	0
80	—	1 1/2	1 1/2	—
81	—	1 1/2	1 1/2	—
82	—	1 1/2	1 1/2	—
83	—	0	0	—

PANEL F5 — F2 USED WHEN DIM "A" = 0"; F8A " " " = 1 1/2"

PANEL FR5 — F2R " " " = 0"; F8AR " " " = 1 1/2"



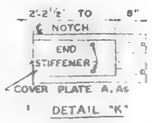
DETAIL "M"



DETAIL "L"

COVER PLATES #29 GA. THICK

DETAIL "N"



DETAIL "K"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C 22300

NOTE

1 DIMENSION IS 10 1/4" FOR FLOORS 45-49 (SOUTH) 45 (NORTH). AND IS 9 1/4" FOR 79-83 (NORTH).

NO	DATE	REVISION	BY
3	6-3-69	AS NOTED	G.D.C.
2	4-24-69	AS NOTED	G.D.C.
1	4-9-69	AS NOTED	G.D.C.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

MISCELLANOUS FLOOR PANEL DETAILS FOR F5 & FR5 PANELS

FABRICATION BY LACLEDE STEEL CO.

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 193-75 & 76

PLATE

APPROVED FOR FABRICATION FOR PONYA — DATE 6/12/69

DRAWN BY: DWS DATE JAN. 20, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR — DATE

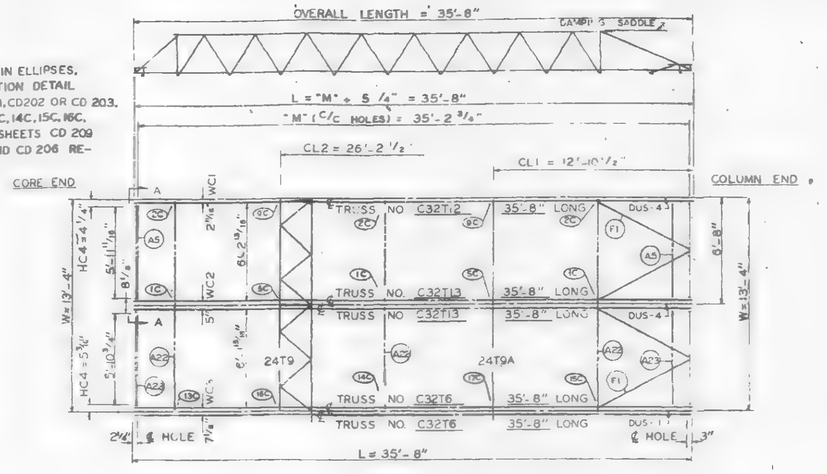
CHECKED BY: T.N.CHURA DATE JAN. 20, 1969 — IN CHARGE OF PROD. DEV.

DETAILED BY: A CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

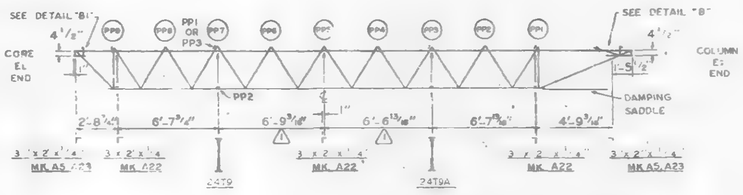
SHEET NO. FP - F5 - 2

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL G1 SIZE 13'-4" x 35'-8"

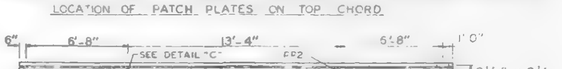


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

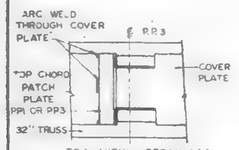
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES N T SHOWN FOR CLARITY

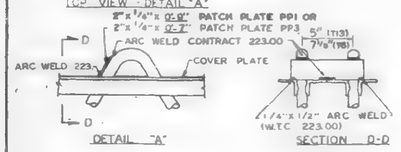
LOCATION OF PATCH PLATES ON TOP CHORD



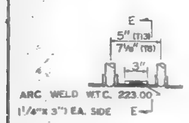
LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



DETAIL "C"

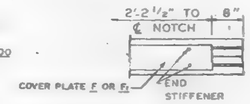
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

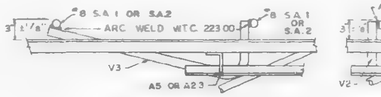
DETAIL "D" DETAIL "E"

COVER PLATES "29 GA. THICK

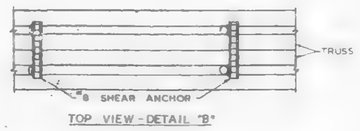
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"



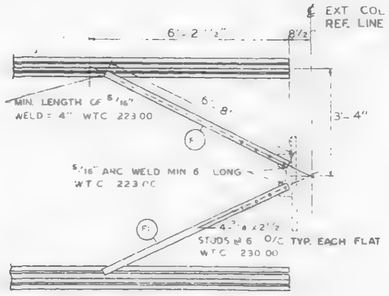
DETAIL "B" DETAIL "B"



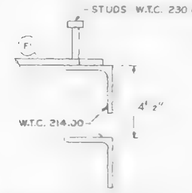
TOP VIEW - DETAIL "B"

SECTION A-A
END SUPPORT ANGLES

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 208
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGING TRUSSES	T9	1	24T9 - 13'-2 3/4"	ST 209
	T9A	1	24T9A - 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	2	3"x2"x1/4" x 8'-1 3/4"	ST 403
	A22	2	3"x2"x1/4" x 13'-2 3/4"	ST 405
	A23	2	3"x2"x1/4"x 8'-0 7/8"	ST 405
DIAGONAL FLATS	F1	4	1'-2 1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	4	2" x 1'-4" x 0'-9"	ST 400
	PP2	8	3" x 1/16" x 0'-3"	ST 400
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G1	1	7"x 0.135 x 7'-0 1/2"	ST 303
	F1	1	7"x 0.135 x 7'-3 1/2"	ST 303
	G	1	9"x 0.135" x 17'-10 1/2"	ST 303
	F	1	9"x 0.135" x 17'-3 1/2"	ST 303
ANGLE	C1	2 OR 3*	2"x 2"x 1/4" x 6"	ST 400
	C2	6** OR 5	2"x 2"x 1/4" x 6"	ST 400
3" C1	C1	8**	2"x 1/4" x 1/4" x 6"	ST 400
"B" SHEAR	SA1	3	"B" REBAR x 0'-7"	ST 400
	SA2	4	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLE		1	3 1/2" x 3" x 3/8" x 3 6/8"	ST 298
	DUS	1	3 1/2" x 3" x 3/8" x 3'-6 3/8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	1C		SEE REF. DRWG.	ST 274
	4C	1	SEE REF. DRWG.	ST 272
	15C		SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

3. *CHANGE BECOMES EFFECTIVE AFTER FLOOR 33, TOWER A.
**UP TO FLOOR 33, TOWER A

NO.	DATE	REVISION	BY
3	6-3-69	AS NOTED	GDC
2	4-8-69	AS NOTED	GDC
1	2-21-69	AS NOTED	GDC

7-284-3 & 3	3-68
7-A84-5 & 6	5-8-68
7-A84-34 & 41	3-68
SA-124	10-68
7-A83-2	1-8-68
7-A81-11 & 12	5-10-68
7-A82-6	2-5-68
7-A84-42	4-68

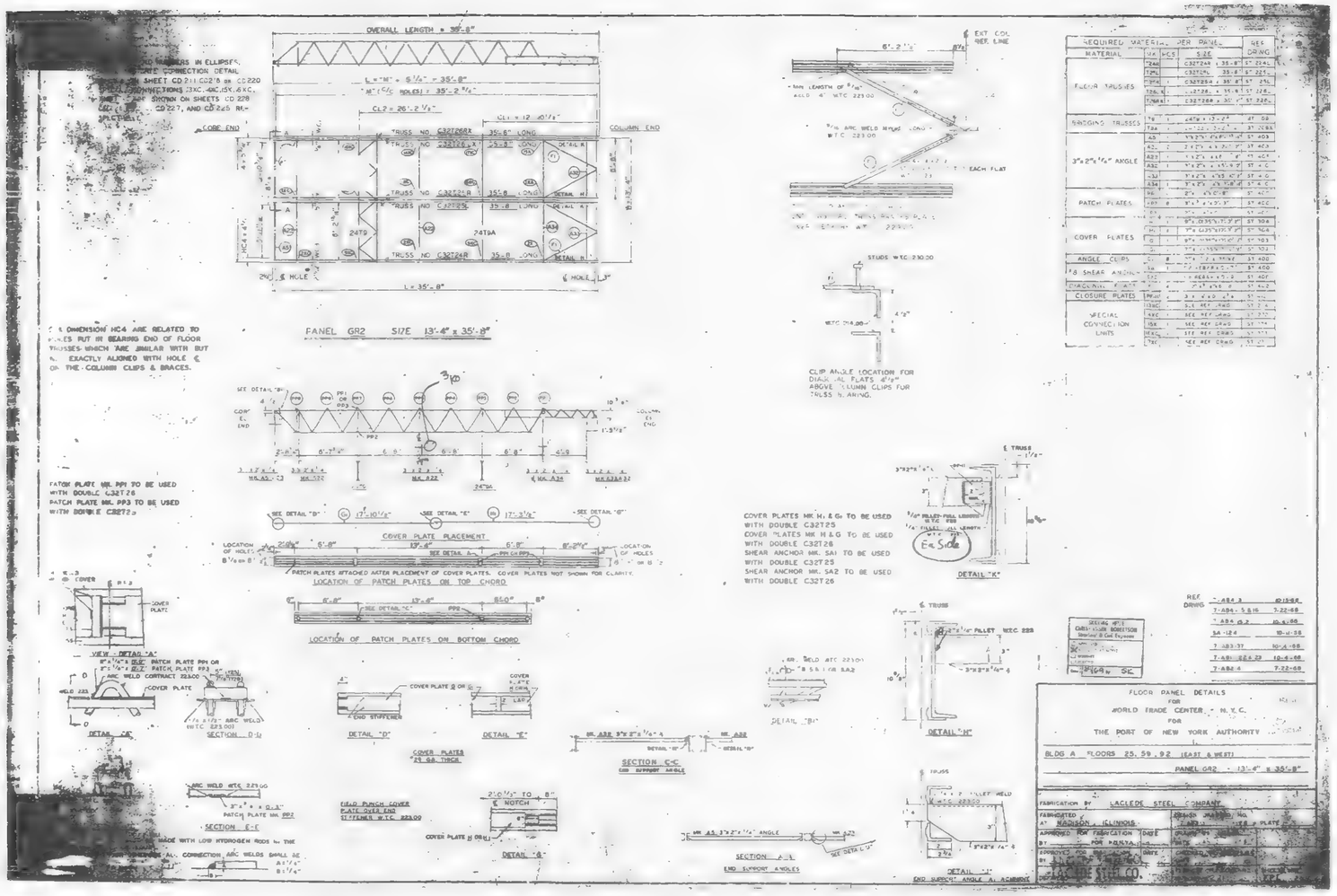
STEEL DETAILS
FOR
NEW YORK CENTER - N Y C
FOR
NEW YORK AUTHORITY

BLDG A [illegible] 40, 50-58, 60-66, 68-74, 84-91 & 93-106 (E & W) (45-49) (51-80-83) (E) PANEL G1 - 13'-4" x 35'-8"

BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (N & W) 70-83 (N) 45-49 (S)

[illegible] STEEL COMPANY

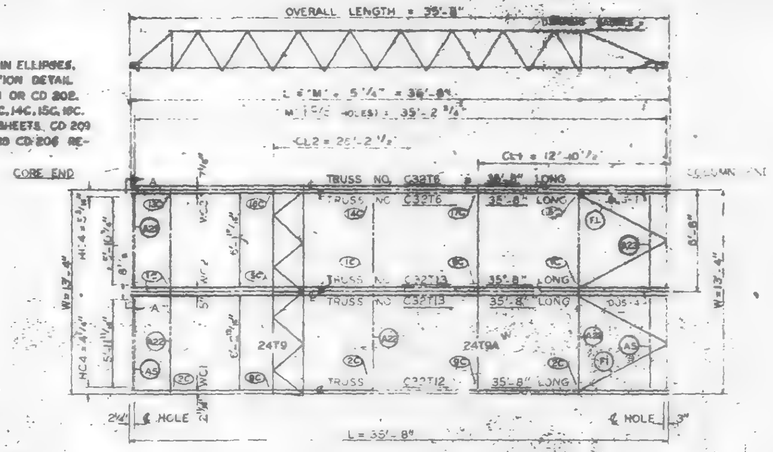
FABRICATE	DESIGN DRAWING NO. 7-283-1" 5-10-68	PLATE
APPROVED	DRAWN BY S.B. DATE APRIL 10, 1968	
APPROVED	CHECKED BY T.M CHURA DATE APRIL 10, 1968	
DETAILED BY [illegible]	FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP-G1



REQUIRED MATERIAL PER PANEL				WEB DRWG
MATERIAL	QTY	MK'S	SIZE	
FLEXIBLE TRUSSES	2	A6	C32T24A x 35'-8" LG	24L
	2	TP1	C32T24 x 35'-8" LG	22L
	2	TP4	C32T28A x 35'-8" LG	24L
	2	TP6 & TP6A	C32T28A x 35'-8" LG	22L
	2	TP8 & TP8A	C32T28A x 35'-0" LG	22L
RIGGING TRUSSES	2	T8	24T9 x 13'-2"	4T 08
	2	T8A	24T9A x 13'-2"	3T 20BA
3" x 2" x 1/4" ANGLE	1	A2	3"x2"x1/4" x 5'-8"	3T 403
	1	A2	3"x2"x1/4" x 6'-8"	3T 403
	1	A2	3"x2"x1/4" x 15'-9"	3T 4 C
	1	A3	3"x2"x1/4" x 13'-2"	3T 4 C
	1	A3A	3"x2"x1/4" x 13'-8"	3T 4 C
PATCH PLATES	2	PP1	8"x1/4" x 4'-3"	3T 4CC
	2	PP2	8"x1/4" x 4'-3"	3T 4CC
	2	PP3	8"x1/4" x 4'-3"	3T 4CC
COVER PLATES	1	H	7"x 0.135"x17'-9"	3T 30A
	1	H1	7"x 0.135"x17'-9"	3T 30A
	1	G	9"x 0.105"x17'-9"	3T 303
	1	G1	7"x 0.105"x17'-9"	3T 303
ANGLE CLIPS	2	C	3"x 3"x 1/4 x 8" LONG	3T 400
1/8 SHEAR ANCHORS	1	SA1	3"x2"x1/8"x 0'-7"	3T 400
	1	SA2	3"x2"x1/8"x 0'-7"	3T 400
DIAGONAL FLATS	2		3"x1"x1/4" x 0'-8"	3T 4C2
CLOSURE PLATES	1	PP1A1	3'-3" x 1'-0" x 1"	3T [illegible]
	1	13BC	SEE REF DRWG	3T 2 C
	1	14C	SEE REF DRWG	3T 2CC
	1	15A	SEE REF DRWG	3T [illegible]
	1	14AC	SEE REF DRWG	3T [illegible]
	1	13C	SEE REF DRWG	3T [illegible]
SPECIAL CONNECTION LIMITS			SEE REF DRWG	3T [illegible]

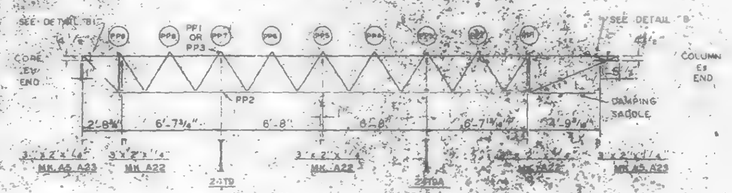
REF DRWG		
T-AB4-3		10-15-68
T-AB4-5 & 16		7-22-68
T-AB4-13.2		10-4-68
SA-12.4		10-4-68
T-AB3-37		10-4-68
T-AB1-224.23		10-4-68
T-AB2-4		7-22-68

LETTERS AND NUMBERS IN ELLIPSES, ie (A5), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

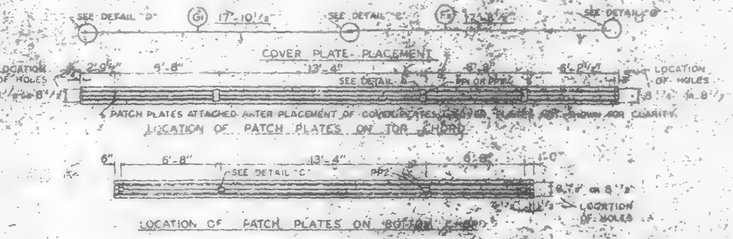


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

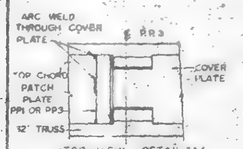
PANEL - GRI - SIZE - 13'-4" x 35'-8"

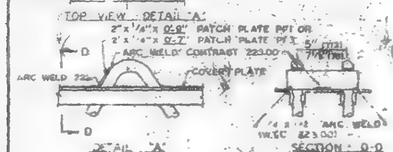


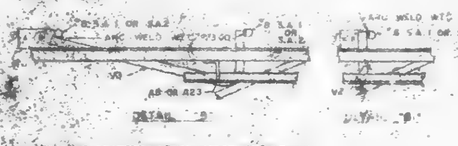
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

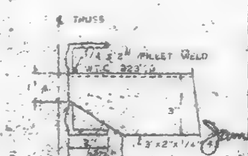


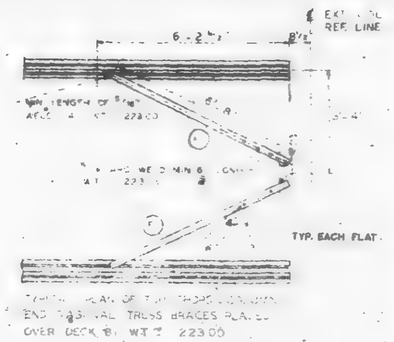
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.

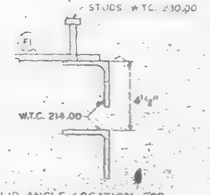












REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRIDGE TRUSSES	TV	1	24T9 - 13'-3 7/16"	ST 209
	TBA	1	24T9A - 13'-2 15/16"	ST 209A
ANGLE	A5	2	3 x 3 x 1/4 x 6'-1 15/16"	ST 403
	A22	3	3 x 3 x 1/4 x 1'-1 1/2"	ST 403
	A23	2	3 x 3 x 1/4 x 0'-11 1/2"	ST 403
PLATE	F	4	1/4" x 6'-8"	ST 412
PATCH PLATES	PP1	4	2" x 1/4" x 0'-8"	ST 400
	PP3	6	3" x 1/4" x 0'-7"	ST 400
	PP2	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	E	1	7" x 0.135" x 35'-8"	ST 303
	F	1	7" x 0.135" x 17'-10 1/2"	ST 303
	G	1	9" x 0.135" x 17'-10 1/2"	ST 303
	H	1	9" x 0.135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	6	4" x 3" x 1/4" x 6"	ST 400
	C1	2	2" x 1 1/2" x 1/4" x 6"	ST 400
7/8 SHEAR ANCHOR	SA1	3	7/8 REBAR x 7"	ST 400
	SA2	3	7/8 REBAR x 7"	ST 400
DAMPING SADDLE	DUS4	1	3 1/2" x 3 1/2" x 6"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3'-6"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

BLDG. A FLOORS IN PLACES 4C, 5C, 5N, 2-6, 68-74, 84-91 & 93-106 (EAST & WEST)

PANEL GRI - 13'-4" x 35'-8"

79-83 (WEST) 48-49 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGNED IN ACCORDANCE WITH AISC 1963 - 5.10.68 - UBC DATE

APPROVED FOR FABRICATION FOR PONTA — DATE 8/16/68

APPROVED FOR FABRICATION BY ___ FOR FABRICATOR — DATE ___

DRAWN BY GWR — DATE APRIL 1968

CHECKED BY TM SMVBA — DATE AUG. 1968

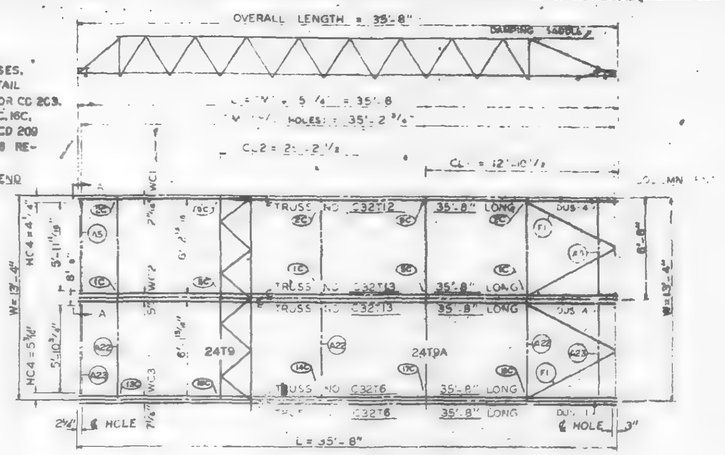
DETAILED BY A.C. WEBER

LACLEDE STEEL CO.

FABRICATION CONT NO WTC 221

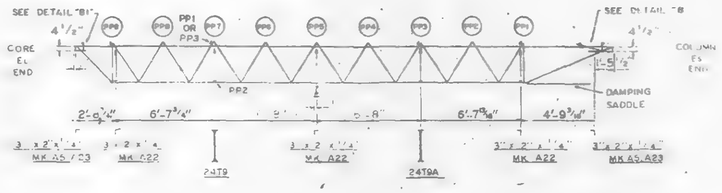
SHEET NO FP-GRI

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 204, CD202 OR CD 203. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 208, CD 208, AND CD 208 RESPECTIVELY.



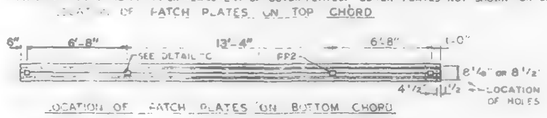
PANEL G1 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES P'T IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

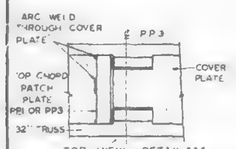


PATCH PLATE MK. PPI TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.

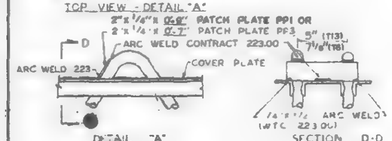
LOCATION OF PATCH PLATES ON TOP CHORD



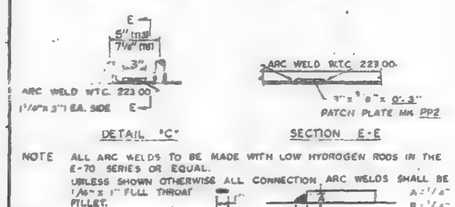
LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"

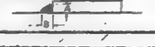


DETAIL "A" SECTION D-D



DETAIL "C" SECTION E-E

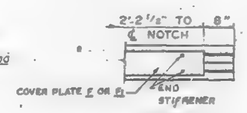
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/16" x 1" FULL THROAT FILLET.



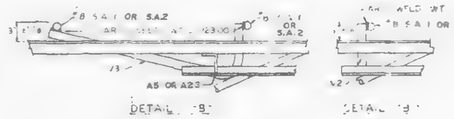
DETAIL "D" DETAIL "E"

COVER PLATES 29 GA. THICK.

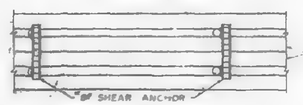
FIELD PLACED COVER PLATE OVER END STIFFENER W.T.C. 222.00



DETAIL "G"

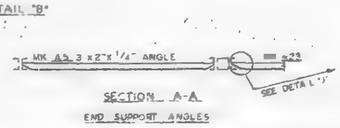


DETAIL "B" DETAIL "F"

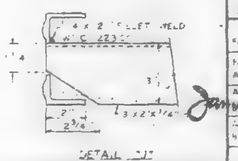


TOP VIEW - DETAIL "B"

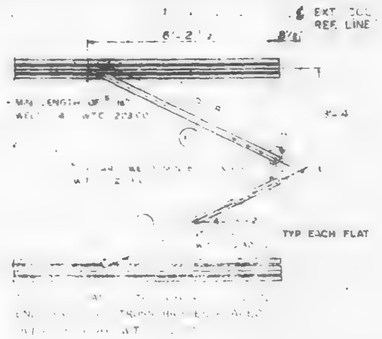
COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T6	2	C32T6 - 35'-8"	ST 206
	T1B	1	C32T12 - 35'-8"	ST 210
	T13	2	C32T13 - 35'-8"	ST 210
BRIDGING TRUSSES	TA	1	24T9 - 13'-5 3/16"	ST 208
	T8A	1	24T9A - 13'-5 3/16"	ST 208A
ANGLE	A4	2	3"x2"x1/4" x 8'-1 1/2"	ST 403
	A22	8	3"x2"x1/4" x 13'-9 1/2"	ST 405
	A23	2	3"x2"x1/4" x 8'-6 1/2"	ST 405
DIAGONAL FLATS	F	4	2"x1/4" x 8'-8"	ST 412
PATCH PLATES	PP1	4	2" x 1/16" x 0'-8"	ST 400
	PP3	8	2" x 1/16" x 0'-8"	ST 400
	PP2	6	2" x 1/16" x 0'-7"	ST 400
COVER PLATES	G	1	7" x .0635" x 17'-3 1/2"	ST 303
	F1	1	7" x .0135" x 17'-3 1/2"	ST 303
	G	1	9" x .0135" x 17'-10 1/2"	ST 303
	F	1	9" x .0135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	6	2 1/2" x 1'-2" x 1 1/4" x 8"	ST 400
	C1	2	2" x 1'-0" x 1 1/4" x 8"	ST 400
7/8" SHEAR ANCHORS	SA1	3	7/8" REBAR x 0'-7"	ST 400
	SA2	3	7/8" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-4	1	3" x 4 1/2" x 2'-0" x 3/16"	ST 298
	DUS-1	1	3 1/16" x 3 1/8" x 3/16" x 3'-8"	ST 298
CONNECTION PLATES				
SPECIAL CONNECTION UNITS	13C	1	SEE REF. DRWG.	ST 274
	14C	1	SEE REF. DRWG.	ST 272
	15C	1	SEE REF. DRWG.	ST 270
	16C	1	SEE REF. DRWG.	ST 273
	17C	1	SEE REF. DRWG.	ST 271

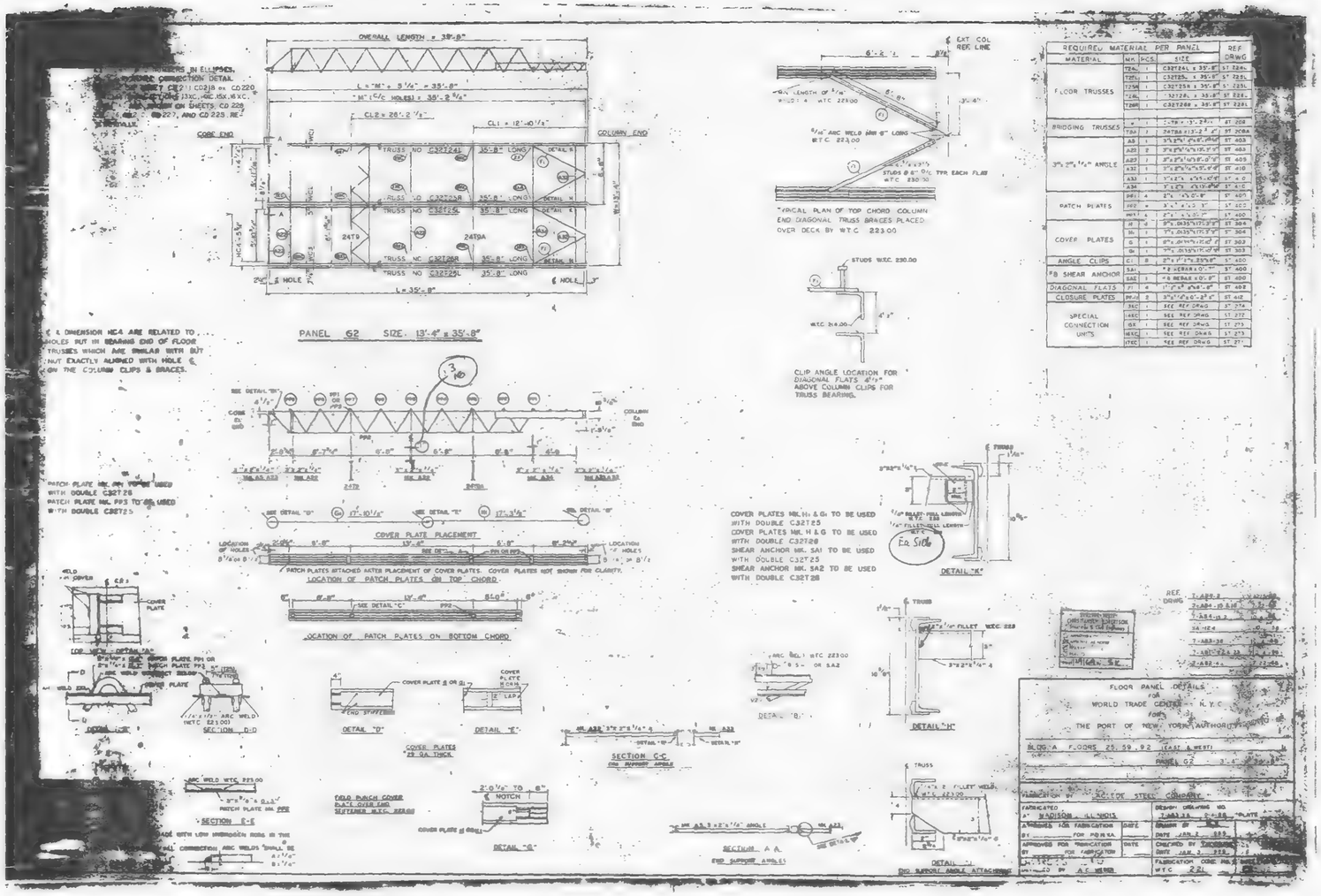
REF DRWG		
ST 206	2&4	3-52
ST 210	1&3&5	5-6-68
ST 208	24 39 41	1-3-68
ST 208A		10-20-67
ST 403		1-3-68
ST 405		5-10-68
ST 412		5-15-68
ST 400		4-1-68

N PANEL DETAILS
FOR
N.Y.C. TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL G1 - 13'-4" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS. DESIGN DRAWING NO 7-A83-1F 5-10-68 PLATE

APPROVED FOR FABRICATION FOR PONYA	DATE 11/9/68	DRAWN BY [illegible]	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	DATE APRIL 10, 1968	
		CHECKED BY T.M. CHURA	
		DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-G1



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF DRWG
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T24R	1	C32T24R x 35'-8"	ST 224R
	T28R	1	C32T28R x 35'-8"	ST 228R
BRIDGING TRUSSES				
3½"x2½"x 5/16" ANGLE	TBA	1	24TBA x 13'-2 3/4"	ST 208A
	A5	1	3½"x2½"x5/16"x 2'-6"	ST 403
	A25	2	3½"x3½"x5/16"x 1'-9"	ST 403
	A23	1	3½"x3½"x5/16"x 2'-0"	ST 403
	A32	1	3½"x3½"x5/16"x 3'-9"	ST 410
	A33	1	3½"x2½"x 5/16"x 1'-4"	ST 4.0
	A34	1	3½"x2½" x5/16"x 3'-4"	ST 410
PATCH PLATES	PP1	4	2'-6" x 5'-0" x 5/8"	ST 400
	PP2	4	3'-4" x 1'-2 1/2" x 5/8"	ST 400
	PP3	4	2'-6" x 1'-4" x 5/8"	ST 400
COVER PLATES	H	4	9"x .0635"x 17'-3 1/2"	ST 304
	H1	1	7"x .0635"x 17'-3 1/2"	ST 304
	G	1	8"x .0635"x 17'-3 1/2"	ST 303
	G1	1	7"x .0635"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C1	8	2½"x 2½"x 3/16"x 8"	ST 400
¾" Ø SHEAR ANCHOR	SA1		¾" Ø STUDS x 0'-7"	ST 400
	SA2	1	¾" Ø STUDS x 0'-8"	ST 400
DIAGONAL FLATS	F1	4	1"x 3"x 3'-8"	ST 402
CLOSURE PLATES	PP10	2	3½"x1'-6"x 0'-3"	ST 412
SPECIAL CONNECTION UNITS	SC	1	SEE REF DRWG	ST 274
	SCC	1	SEE REF DRWG	ST 277
	SCE	1	SEE REF DRWG	ST 273
	SCG	1	SEE REF DRWG	ST 273
	SCH	1	SEE REF DRWG	ST 273
	SCI	1	SEE REF DRWG	ST 27-

REF. DRWG	
T-AB3-2	W WELDING
T-AB4-10 & 16	
T-AB4-18.2	
34-12.4	
T-AB3-34	
T-AB3-22.4, 23	
T-AB2-4	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92 (EAST & WEST)
PANEL G2

FABRICATION BY ACME STEEL COMPANY

FABRICATED		DESIGN DRAWING NO.	T-AB3 28 2-1-58 "PLATE A"
A MADISON, ILLINOIS		DRAWN BY	
REVISED FOR FABRICATION	DATE	CHECKED BY	
FOR		DATE JAN. 2	1959
APPROVED FOR FABRICATION	DATE	CHECKED BY	THOMPSON
BY FOR FABRICATION		DATE JAN. 3	1959
DRAWN BY T.C.		FABRICATION CODE PAL-S	
CHECKED BY A.F. WEBER		W.T.C.	221

LETTERS AND NUMBERS IN ELLIPSES, USED TO INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 211 CD218 OR CD220 DETAIL. (A SERIES ITEMS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD226, CD 0, CD227, AND CD 225 RESPECTIVELY.

OVERALL LENGTH = 35'-8"

L = "M" + 5 1/16" = 35'-8"

"M" = C/C "MILES" = 35'-2 3/4"

GL2 = 20'-2 1/2"

GL1 = 12'-10 1/2"

CORE END

COLUMN END

TRUSS NO C32T24L 35'-8" LONG

TRUSS NO C3 T25R 35'-8" LONG

TRUSS NO C32T25L 35'-8" LONG

TRUSS NO C32T26R 35'-8" LONG

TRUSS NO C32T26L 35'-8" LONG

24T9

24T9A

DETAIL H

DETAIL K

HC4 = 5'-10 3/4"

HC4 = 5'-11 3/8"

2 1/4" ℄ HOLE

℄ HOLE

L = 35'-8"

PANEL G2 SIZE 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

℄ EXT. COL REF. LINE

6 - 2 1/2"

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00

5/16" ARC WELD MIN 6" LONG W.T.C. 223.00

STUDS W.T.C. 230.00

TYP EACH FLAT

TYPICAL PLAN OF TOP CHORD - COLUMN END DIAGONAL, TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	QTY	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 70[illegible]
	T9A	1	24T9A x 12'-2 3/4"	ST 709A
3" x 2" x 1/4" ANGLE	A5	1	3" x 2" x 4'x 4"-11 3/8"	ST 403
	A22	1	3" x 2" x 4'-[illegible]	ST 403
	A23	1	3" x 2" x 4'-[illegible]	ST 403
	A32	1	3" x 2" x 4'-5"	ST 403
	A33	1	3" x 2" x 4'-5 1/2"	ST 403
	A34	1	3" x 2" x 4'-11 3/8"	ST [illegible]
PATCH PLATES	PP1	4	2" x 4" x 0'-8"	ST 401
	PP2	8	2" x 4" x 0'-7"	ST 401
	PP3	4	2" x 4" x 0'-7"	ST 401
COVER PLATES	H	1	9" x 0'-35" x 1'-3"	ST 304
	H1	1	7" x 0'-35" x 1'-3"	ST 304
	G	1	9" x 0'-35" x 1'-3"	ST 303
	G1	1	7" x 0'-35" x 1'-3"	ST 303
ANGLE CLIPS	C1	8	2" x 1'-2" x 2'-5"	ST 400
#8 SHEAR ANCHOR	SA1	[illegible]	7" x #8 REBAR x 0'-7"	ST 404
	SA2	[illegible]	7" x #8 REBAR x 0'-9"	ST 404
DIAGONAL FLATS	F	4	[illegible]	ST 402
CLOSURE PLATES	PP11	2	3" x 4" x 0'-2"	ST 401
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DRWG	ST [illegible]
	14XC	1	SEE REF DRWG	ST 222
	15X	1	SEE REF DRWG	ST 225
	16XC	1	SEE REF DRWG	ST 223
	17XC	1	SEE REF DRWG	ST [illegible]

SEE DETAIL "B1"

PP1 OR PP3

PP2

COLUMN END

1'-5 1/2"

10 5/8"

2'-8 1/4" 6'-7 3/4" 6'-9 3/16" 6'-0 13/16" 6'-8" 4'-9

3" x 2" x 1/4" MK. A5 & A23

3" x 2" x 1/4" MK. A22

3" x 2" x 1/4" MK. A22

24T9

3" x 2" x 1/4" MK. A34

3" x 2" x 1/4" MK. A33 A32

PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26

PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

SEE DETAIL "D" G1 17'-10 1/2" SEE DETAIL "E" H1 17'-3 1/4" SEE DETAIL "G"

COVER PLATE PLACEMENT

LOCATION OF HOLES 2 1/4" 2'-0 1/2" 6'-8" 13'-4" 6'-8" 6'-2 1/2" 2 1/4" LOCATION OF HOLES

8 1/8 OR 8 1/2" SEE DETAIL A PP1 OR PP3 8 1/8" OR 8 1/2"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD.

6" 6'-8" 13'-4" SEE DETAIL "C" PP2 5'-0" 6"

LOCATION OF PATCH PLATES ON BOTTOM CHORD

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25.
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

℄ TRUSS

1 1/2"

3"x2"x1/4"

PP11

3"

2" MIN.

1/4" FILLET FULL LENGTH W.T.C. 223

1/4" FILLET FULL LENGTH EACH SIDE - W.T.C. 223

10 3/8"

DETAIL "K"

NO.	DATE	REVISION
1	7-7-88	AS NOTED
2	3-11-89	AS NOTED
3	2-4-89	AS NOTED

3 REF DRWGS: ST AB423; ST AB415 & 16; ST AB413-2; ST 124; ST 703-382; ST AB[illegible]; ST AB[illegible]

ARC WELD THROUGH GUSSET

℄ A B 3

CHORD

COVER PLATE

PATCH PLATE MK. PP3

32" TRUSS

TOP VIEW - DETAIL "A"

2" x 1/4" x 0'-6" PATCH PLATE PP1 OR 2" x 1/4" x 0'-7" PATCH PLATE PP3

ARC WELD CONTRACT 223.00

5" (T25) 7 5/8" (T26)

ARC WELD 223

COVER PLATE

1/4" (T25) 3/8" (T26) ARC WELD (W.T.C. 223.00)

DETAIL "A" SECTION D-D

4"

COVER PLATE G OR G1

END STIFFENER

DETAIL "D"

COVER PLATE H OR H1

2" LAP

DETAIL "E"

COVER PLATES 28 GA. THICK

ARC WELD W.T.C. 223.00

3" x 3" x 0'-8" x 0'-2" PATCH PLATE MK. PP2

DETAIL "C" SECTION E-E

FIELD CHINCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

2'-0 1/2" TO ℄ NOTCH 8"

COVER PLATE H OR H1

DETAIL "G"

ARC WELD W.T.C. 223.00

3" 1/2"

#8 S.A.1 OR S.A.2

V2

DETAIL "B1"

MK. A32 3"x2"x1/4" ANGLE

MK. A33

DETAIL "M"

DETAIL "N"

SECTION C-C END SUPPORT ANGLE

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLET. A = 1/4" B = 1/4"

℄ TRUSS

1 1/2"

2"x1/4" FILLET W.T.C. 223

3"

10 3/8"

3"x2"x1/4" ∠

DETAIL "H"

MK. A5 3"x2"x1/4" ANGLE

MK. A23

SEE DETAIL "J"

SECTION A-A END SUPPORT ANGLES

℄ TRUSS

1/4" x 2" FILLET WELD W.T.C. 223.00

3"

2"

2 3/4"

9"x2"x1/4" ∠

DETAIL "J" AND SUPPORT ANGLE ATTACHMENT

FLOOR PANEL DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 23 59 92 (EAST & WEST)

PANEL G2

BLDG. B FLOORS 45 59 82

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS

DESIGN DRAWING NO. 1-[illegible]-38 SHEET [illegible]

APPROVED FOR FABRICATION FOR PLANT A DATE 6/[illegible]/72

DRAWN BY [illegible] DATE JAN. [illegible], 89

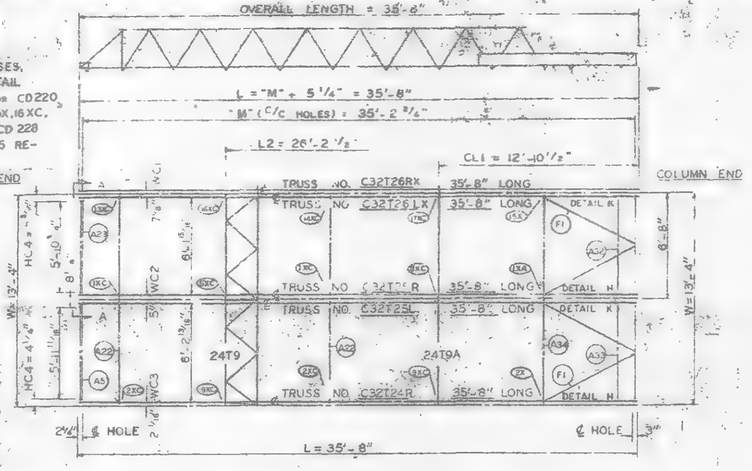
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

CHECKED BY [illegible] DATE [illegible]

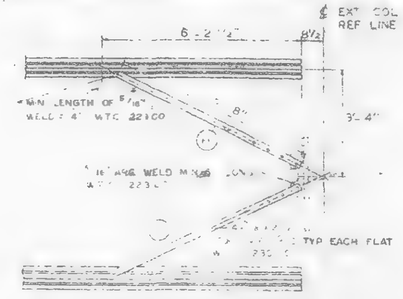
DETAILED BY [illegible]

FABRICATOR CONTRACT NO. [illegible]

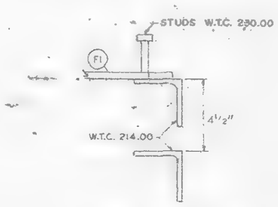
...AND NUMBERS IN ELLIPSES, ... FLOOR CONNECTION DETAIL ... CD 211 CD 218 OR CD 220, SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, ... ARE SHOWN ON SHEETS CD 228 ... CD 210, CD 217, AND CD 225 RESPECTIVELY.



PANEL GR2 SIZE - 13'-4" x 35'-8"

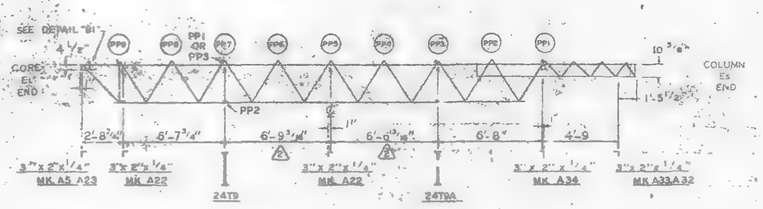


REQUIRED MATERIAL PER PANEL				REF DWG
MATERIAL	MK	QTY	SIZE	
FLOOR TRUSSES	26R	1	C32T24R x 35'-8"	ST 204
	25L	1	C32T25L x 35'-8"	ST 204
	25R	1	C32T25R x 35'-8"	ST 204
	26L	1	C32T26LX x 35'-8"	ST 204
	26RX	1	C32T26RX x 35'-8"	ST 204
BRIDGING TRUSSES	B	2	24T9 x [illegible]	[illegible]
	B9A	1	24T9A x [illegible]	[illegible]
	B5	1	[illegible]	[illegible]
3" [illegible]	B3	1	[illegible]	[illegible]
	B4	1	[illegible]	[illegible]
	B14	1	[illegible]	[illegible]
PATCH PLATE	P1	1	3" x [illegible]	ST 104
	P3	1	[illegible]	ST 104
COVER PLATES	C	1	9" x [illegible]	ST 103
	G	1	7" x [illegible]	ST 105
ANGLE CLIPS	C1	8	2" x [illegible]	ST 400
3/8 SHEAR ANCHOR	SA2	1	1/2 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	4	1" x 3" x 8"X6'-8"	ST 402
CLOSURE PLATES	P5	4	3/4" x 4"x [illegible]	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF DWG.	ST [illegible]
	14XC	1	SEE REF DWG.	ST [illegible]
	15X	1	SEE REF DWG.	ST [illegible]
	16XC	1	SEE REF DWG.	ST 225
	17XC	1	SEE REF DWG.	ST 211



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

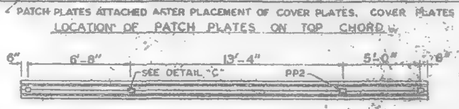
L & OMISSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ OF ... COLUMN CLIPS & BRACES.



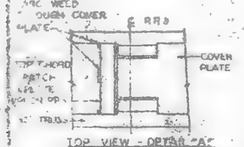
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

COVER PLATE PLACEMENT

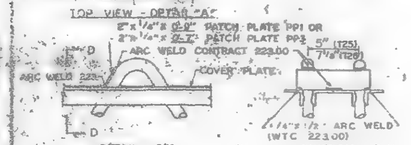
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY



LOCATION OF PATCH PLATES ON BOTTOM CHORD



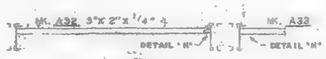
TOP VIEW - DETAIL "A"



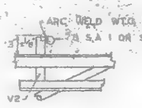
DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

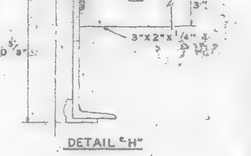
COVER PLATES 29 GA. THICK



SECTION C-C
END SUPPORT ANGLE



DETAIL "B1"



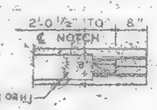
DETAIL "H"

DETAIL "C"

SECTION E-E

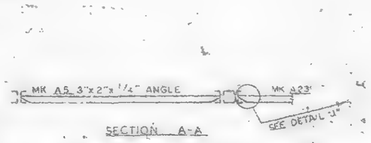
NOTE: ALL ARC WELDS TO BE MADE WITH LOW-HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE
1/16" FILLET
FULL THROAT
A = 1/4"
B = 1/16"

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

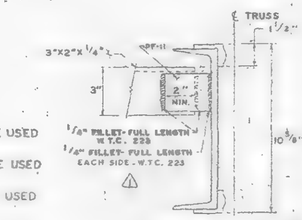


DETAIL "G"

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25.
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

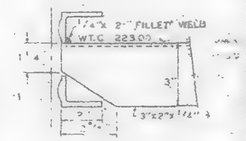


SECTION A-A
END SUPPORT ANGLES



DETAIL "K"

DETAIL "H"



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

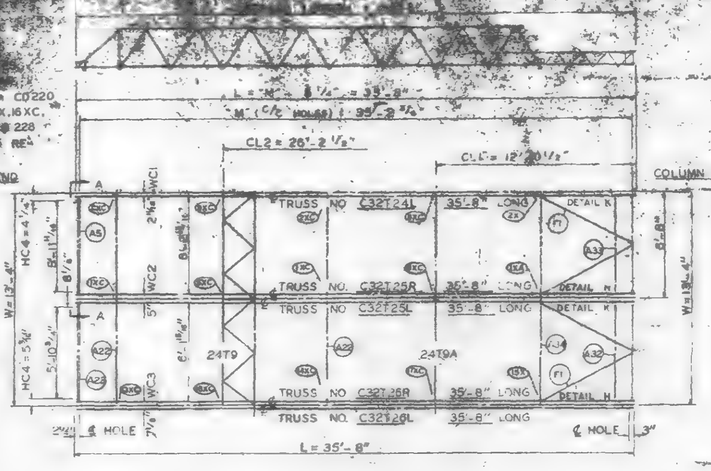
NO.	DATE	REVISION	BY
3	7-7-69	AS NOTED	G.D.C
2	3-11-69	AS NOTED	G.D.C
1	2-4-69	AS NOTED	G.D.C

REF DWG		
3	A84-3	10-15-68
	7-A84-5 & 16	7-22-68
	7-A84-15.2	10-4-68
	SA-1.24	1-15-69
	7-A83-37	10-4-68
	7-A81-22 & 23	10-4-68
	7-A82-4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
HPORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92 (EAST & WEST)
PANEL GR2 13'-4" x 35'-8"
BLDG B FLOORS 25, 59 & 92 (NORTH & SOUTH) (2)

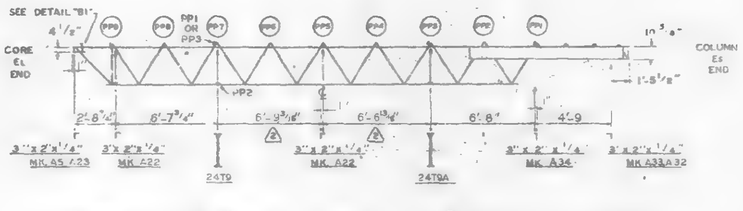
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-37, 10-4-68 PLATE
APPROVED FOR FABRICATION BY James Lafferty N.Y.A. DATE 11/12/68
APPROVED FOR FABRICATION BY [illegible] DATE
DRAWN BY B.B. DATE JAN 2, 1969
CHECKED BY T.M. CHUBA DATE JAN 3, 1969
DETAILED BY [illegible] A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-GR2



PANEL G2 SIZE - 13'-4" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES FOR SEAT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

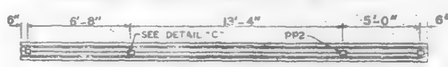
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25



COVER PLATE PLACEMENT

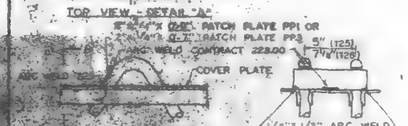
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW - DETAIL "A"

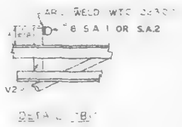


DETAIL "A" SECTION D-D

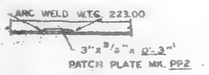
DETAIL "D" DETAIL "E"

COVER PLATES 28 GA. THICK

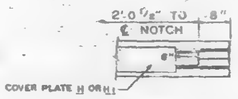
SECTION C-C END SUPPORT ANGLE



DETAIL "B"

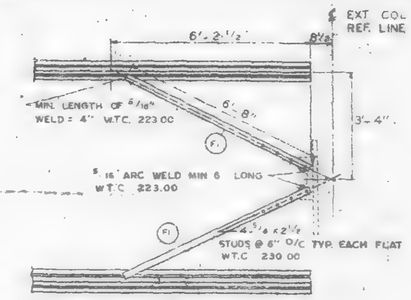


SECTION E-E

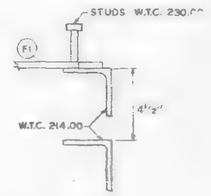


DETAIL "G"

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x 1" FULL THROAT FILLET.

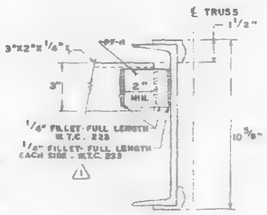


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00

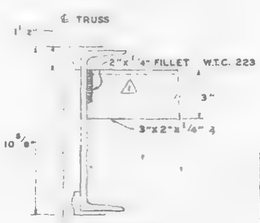


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATES MK. H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26



DETAIL "K"



DETAIL "H"

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	QTY	SIZE	WT.
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 109
	T9A	1	24T9A x 13'-2 3/4"	ST 109A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4"x 4'-8 1/2"	ST 403
	A2	1	3"x2"x1/4"x 13'-2 3/4"	ST 402
	A23	1	3"x2"x1/4"x 5'-8"	ST 402
	A32	1	3"x2"x1/4"x 5'-4 3/4"	ST 410
	A33	1	3"x2"x1/4"x 4'-8 1/2"	ST 410
	A34	1	3"x2"x1/4"x 4'-8 1/2"	ST
PATCH PLATES	PP1	4	3"x 1/4" x 0'-8"	ST 4
	PP3	8	3"x 1/4" x 0'-3"	ST 4
COVER PLATES	G		x x	
	G1		x x	
	H		x x	
	H1		x x	
ANGLE CLIP	SA1		x x	
#8 SHEAR STUDS	SA2		(8 PER 6" ROW)	
DIAGONAL FLATS	D1	4	1" x 3" x	
SPACER PLATES	PP2	4	x x	
	PP4		x x	
SHEAR CONNECTION PLATE	SAX		SEE REF. DWG. NO.	
	DX		SEE REF. DWG. NO.	
	TX		SEE REF. DWG. NO.	

NO	DATE	REVISION	BY
3	7-7-69	AS NOTED	
2	3-11-69	AS NOTED	
1	2-4-69	AS NOTED	

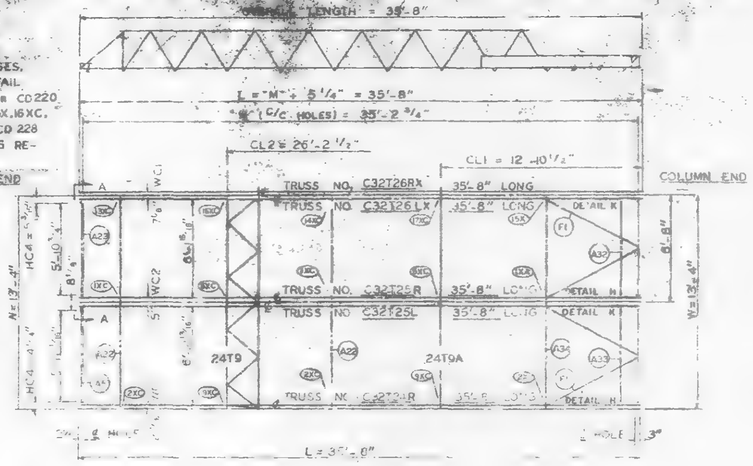
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG 1 FLOORS 75 59 92 (EAST & WEST)
PANEL G2 SIZE 13'-4" x 35'-8"
BLDG. 2 FLOORS 75, 59 & 92

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7383 3 SHEET 6 OF 64 PLATE
APPROVED FOR FABRICATION James W. White DATE 1/2/70	DRAWN BY DATE JAN 2 1970
APPROVED FOR FABRICATION BY DATE	CHECKED BY T.M. CHURA DATE JAN 1970
DETAILED BY	FABRICATOR'S PRINT NO. SHEET NO. FP-G2

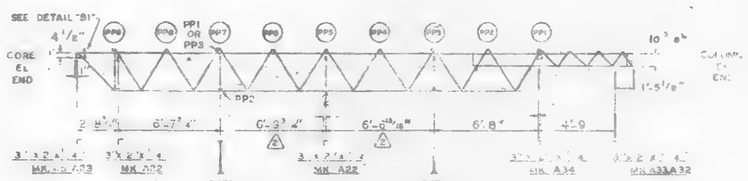
...BERS IN ELLIPSES,
...CONNECTION DETAIL
... CD 211 CD 218 OR CD 220
...ONS 13XC, 14XC, 15X, 16XC,
... 17XC ARE SHOWN ON SHEETS CD 228
CD 226, CD 210, CD 227, AND CD 225 RE-
SPECTIVELY.

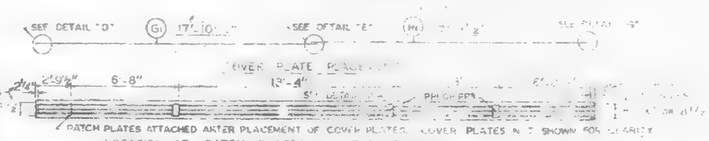


PANEL GR2 SIZE 3'-4" x 35'-8"

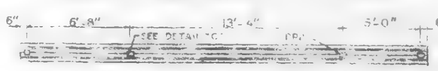
& DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE & THE COLUMN CLIPS & BRACES.

PATCH PLATE MK. PPI TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25



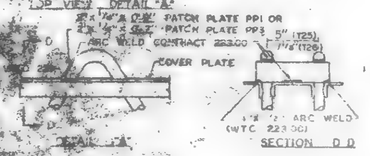


LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

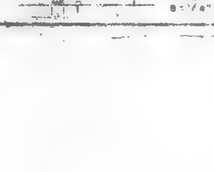
COVER PLATES 29 GA THICK

SECTION C-C
END SUPPORT ANGLE

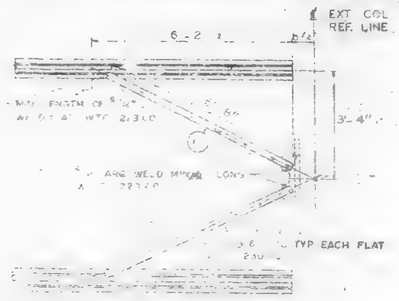
DETAIL "B"

SECTION E-E

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE ... OR EQUAL.
... OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT

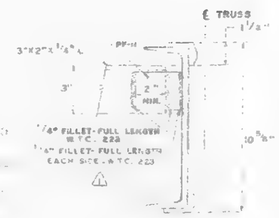


DETAIL "G"



REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES ⚠	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8"	ST 226L
	T26RX ⚠	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/8"	ST 209
	T9A	1	24T9A x 13'-2 3/8"	ST 209A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4"x8'-11 3/4"	ST 403
	A22	2	3"x2"x1/4"x1'-4 7/8"	ST 403
	A23	1	3"x2"x1/4"x6'-1 3/8"	ST 405
	A32	1	3"x2"x1/4"x4'-9 1/2"	ST 410
	A33	1	3"x2"x1/4"x5'-10 1/2"	ST 410
	A34	1	3"x2"x1/4"x13'-8 3/4"	ST 410
PATCH PLATES	PP1	4	2"x1 1/4"x0'-8"	ST 400
	PP2	8	3"x3 5/8"x0'-3"	ST 400
	PP3	4	2"x1 3/4"x0'-7"	ST 400
COVER PLATES	H	1	9"x.0135"x17'-3 1/2"	ST 304
	H1	1	7"x.0135"x17'-3 1/2"	ST 304
	G	1	9"x.0135"x17'-10 1/2"	ST 303
	G1	1	7"x.0135"x17'-10 1/2"	ST 303
ANGLE CLIPS	C1	8	2"x1 1/2"x.75"x6"	ST 400
7/8 SHEAR ANCHOR	SA1	1	#6 REBAR x 0'-7"	ST 400
	SA2	1	#5 REBAR x 0'-8"	ST 400
[illegible] PLATES	[illegible]	4	2"x3 5/8"x0'-8"	ST 402
[illegible] PLATES	[illegible]	1	3"x1 1/4"x0'-2 1/4"	ST 402
FIELD CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 213
	14XC	1	SEE REF. DRWG.	ST 214
	15X	1	SEE REF. DRWG.	ST 215
	16XC	1	SEE REF. DRWG.	ST 216
	17XC	1	SEE REF. DRWG.	ST 221

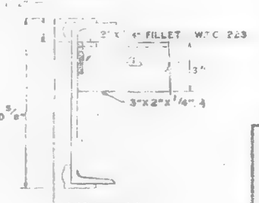
COVER PLATES MK. G & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & H1 TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26



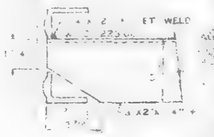
DETAIL "K"

NO	DATE	
⚠	7-7-69	RE [illegible]
⚠	5-11-69	AS NOTED
⚠	8-4-69	AS NOTED

REF. DRWG



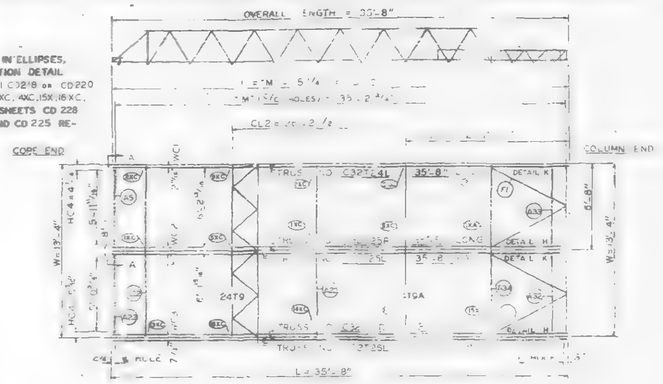
DETAIL "H"



DETAIL "J"
E.A. SUPPORT ANGLE ATTACHMENT

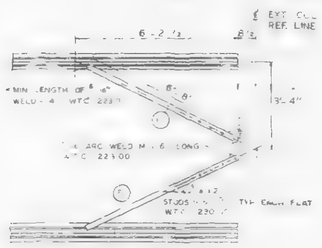
FLOOR FRAMING PLAN FOR WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
BLDG A FLOORS 1 59 92 (EAST & WEST)
BLDG B FLOORS 2 59 & 92

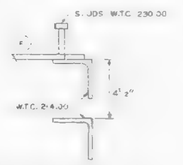
LETTERS AND NUMBERS IN ELLIPSES, (G), (H), AND (K) ARE CONNECTION DETAIL MARKS ON SHEET CD 211, CD 218 OR CD 220. SPECIAL CONNECTIONS 13XC, 4XC, 15XC, 16XC, 17XC ARE SHOWN ON SHEETS CD 228 AND 226, CD 210, CD 227, AND CD 225 RESPECTIVELY.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

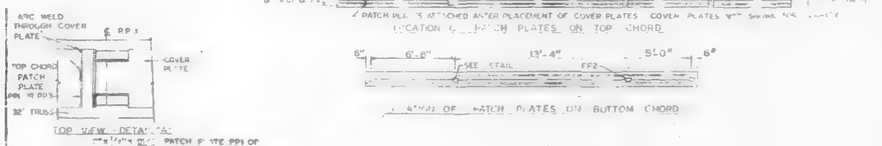
PANEL G2 - SIZE 3'-4" x 35'-8"



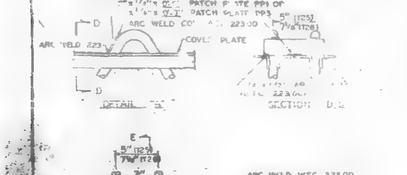


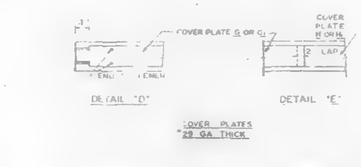
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

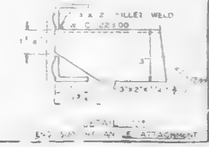
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T2N	1	C32T2N x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T28L	1	C32T28L x 35'-8"	ST 228L
	T28R	1	C32T28R x 35'-8"	ST 228L
BRIDGING TRUSSES	T9	1	24T9 x 3'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4"x4'-10 3/4"	ST 403
	A2	2	3"x2"x1/4"x13'-5 3/4"	ST 403
	A23	3	3"x2"x1/4"x28'-4"	ST 405
	A32	1	3"x2"x1/4"x35'-9 3/4"	ST 410
	A33	1	3"x2"x1/4"x35'-10 3/4"	ST 410
	A34	1	3"x2"x1/4"x35'-8 3/4"	ST 410
PATCH PLATES	PP1	4	2"x1"x1'-0"	ST 402
	PP3	2	3"x3"x8"x0'-3"	ST 402
	PP2	4	2"x1"x1'-0"	ST 402
	[illegible]	[illegible]	[illegible]	ST 304
	[illegible]	[illegible]	[illegible]	ST 304
COVER PLATES	[illegible]	[illegible]	8"x 0'-11 5/8"x35'-10"	ST 303
	[illegible]	[illegible]	3"x 0'-11 5/8"x35'-10"	ST 303
ANGLE CLIPS	C1	8	4"x 2"x 0'-2 5/8"	ST 402
SHEAR ANCHOR	SA1	[illegible]	REBAR 0'-7"	ST 404
	SA2	4	REBAR 1'-0"	ST 404
	[illegible]	[illegible]	[illegible]	ST 4[illegible]
REF DETAIL CONNECTION UNITS	13XC		SEE REF DRWG	ST 213
	14XC		SEE REF DRWG	ST 214
	5X		SEE REF DRWG	ST 215
	16XC	1	SEE REF DRWG	ST 216
	17XC		SEE REF DRWG	ST [illegible]

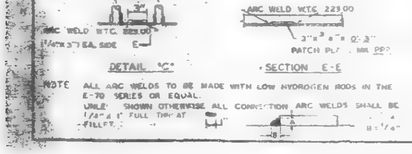


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

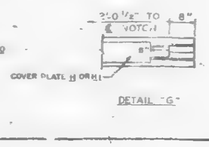


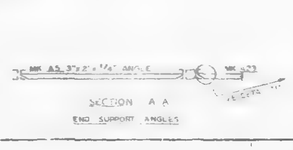


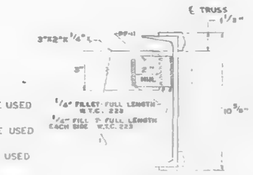




NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 4" FULL THROAT FILLET.







COVER PLATES MK H1 & G1 TO BE USED WITH DOUBLE C32T25
COVER PLATES MK H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

NO	DATE	REVISION
2	1-16-69	AS NOTED
1	1-6-69	AS NOTED

FLOOR PANEL [illegible]
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

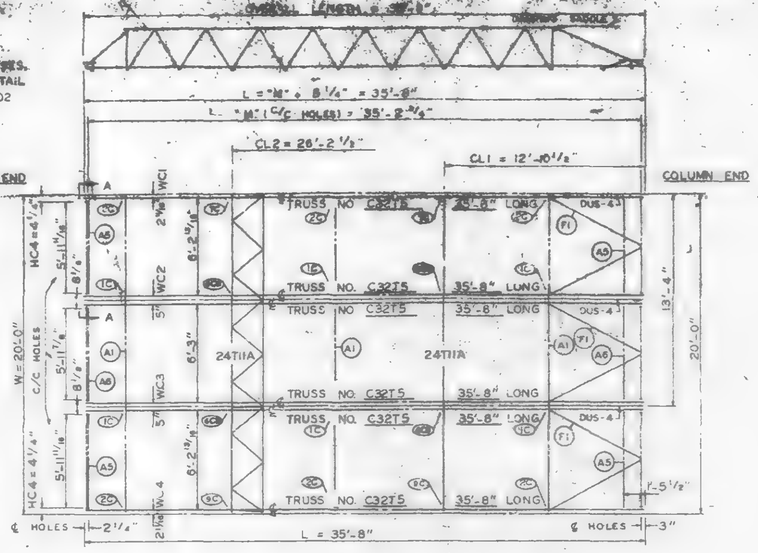
BLDG A FLOORS 25, 59, 92 (EAST & WEST)

PANEL G2 - 13'-6" & 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

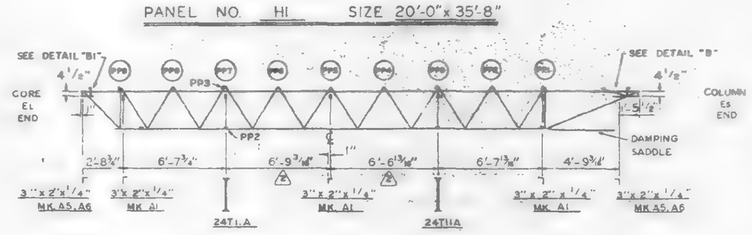
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. [illegible]	PLATE
APPROVED FOR FABRICATION	DATE 1/6/69	DRAWN BY [illegible]	
ROLLED FOR FABRICATION	DATE	DATE JAN 2 1969	
		CHECKED BY TM 2-3-69	
LACLEDE STEEL CO.		DATE JAN 3 1969	
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-G2

...ENDS ARE MARKED IN ELLIPSES.
...CONNECTION DETAIL
...SHEET CD 001, CD 002

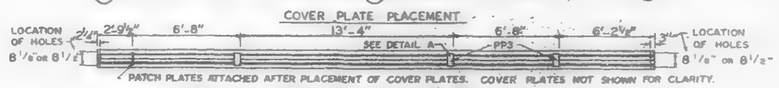


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. H1 SIZE 20'-0" x 35'-8"

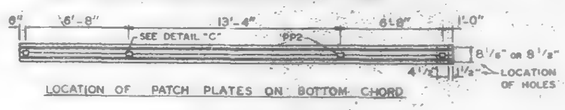


COVER PLATE PLACEMENT

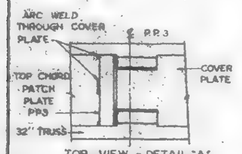


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

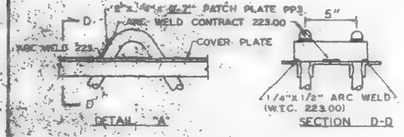
LOCATION OF PATCH PLATES ON TOP CHORD



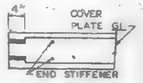
LOCATION OF PATCH PLATES ON BOTTOM CHORD



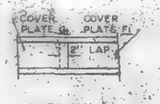
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

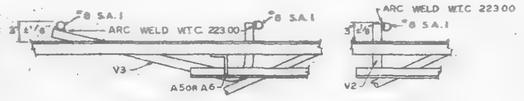


DETAIL "D"

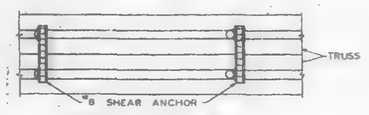


DETAIL "E"

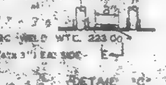
COVER PLATES 1/2" GA. THICK



DETAIL "B" DETAIL "B1"



TOP VIEW - DETAIL "B"

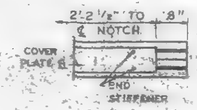


DETAIL "C"

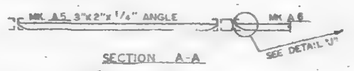
SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ℄ FULL THROAT FILLET.

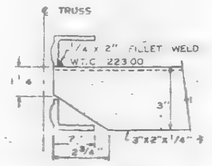
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



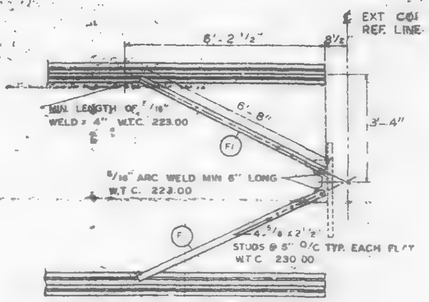
DETAIL "G"



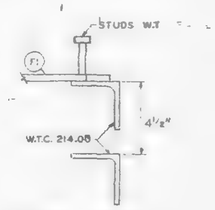
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQ'D MATERIAL	MK	PCS	PER PANEL SIZE	REF. DRWG
FLOOR TRUSSES	T5	8	C32T5 - 35'-8"	ST209
BRIDGING TRUSSES	T11A	2	2T11A - 19'-1"	ST211
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4" x 15"	ST403
	A5	4	3"x2"x1/4" x 8'-4 1/2"	ST403
	A6	2	3"x2"x1/4"x 2'-2"	ST403
DIAGONAL FLATS	F1	6	1 1/2"x 6" x 6'-...	ST402
PATCH PLATES	PP3	12	2'x 1 1/4" x 0'-7"	ST400
	PP2	12	3"x 3 1/8" x 0'-3"	ST400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/8"	ST303
	F1	3	7"x 0.135"x 17'-3 1/2"	ST303
ANGLE CLIPS	C2	12	8"x 2"x 1/2" x 1 1/4" x 6"	ST 400
3/4" ℄ SHEAR ANCHOR	SA1	9	3/4" ℄ HEBER STUD - 7"	ST 400
DAMPING SADDLE	DS-4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/8"	ST298
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3'-8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x 3'-9" x 0'-9"	ST 400
	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

NO.	DATE	REVISION	BY
3	6-23-69	AS NOTED	G.D.C
2	2-21-69	AS NOTED	G.D.C
1	10-18-68	MATERIAL LIST	G.D.C

3 REF DRWG

7-AB4-3.1	1-3-69
7-AB4-5 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11A-12	7-22-68
7-AB2-6	7-22-68
7-AB4-42 & 3	9-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

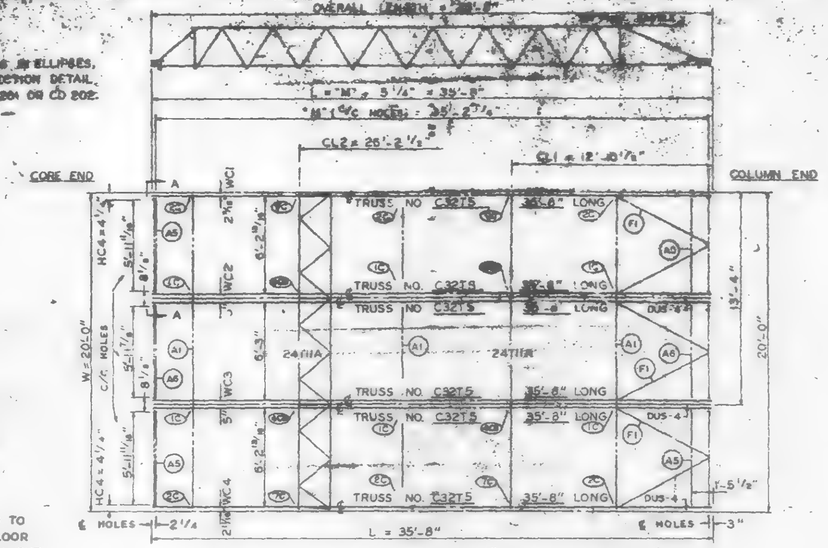
BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66 & 74, 84-91 &
93-106 (E & W) 45-49 (W) 80-83 (E) PANEL H1 ... 0" x 35'-8"
BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91, 93-106 (N & S) 45-49 (W) 80-83 (E)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-17	PLATE
APPROVED FOR FABRICATION BY ... FOR PONYA	DATE 4/2/70	DRAWN BY B.M.A. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY ... FOR FABRICATOR	DATE	CHECKED BY T.M.CHUSA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-H1

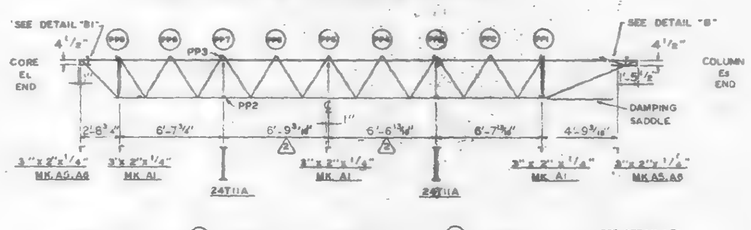
Laclede Steel Co.

LETTERS AND NUMBERS IN ELLIPSES, & AXIS INDICATE CONNECTION DETAIL. SHOWN ON SHEET CD 201 OR CD 202.

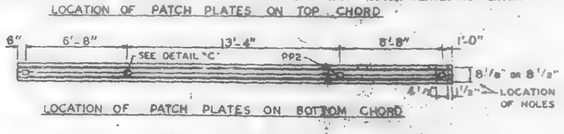


PANEL NO. HR1 SIZE 20'-0" x 35'-8"

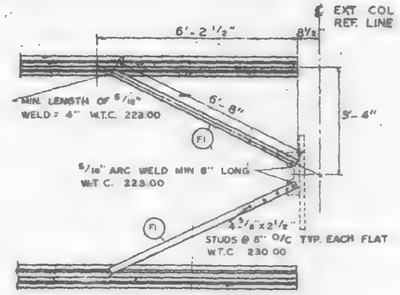
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



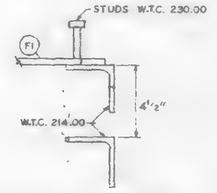
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



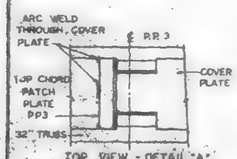
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

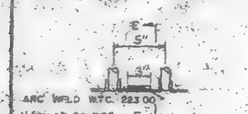
REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T - 35'-8"	ST295
BRIDGING TRUSSES	T11A	2	24T11A - 18'-11"	ST811A
3"x2"x1/4" ANGLE	A1	3	3"x 2"x 1/4"x 19'-11"	ST 403
	A5	4	3"x2"x1/4"x6'-1 7/16"	ST 403
	A6	2	3"x 2" x 1/4" x 6'-2"	ST 403
DIAGONAL FLATS	F	6	1" x 2 5/8" x 6'-8"	ST 402
PATCH PLATES	PP3	12	2"x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/16" x 0'-3"	ST 400
COVER PLATES	GP	3	7" x 0.135" x 17'-0 1/8"	ST 303
	F1	3	7" x 0.135" x 7'-3 1/8"	ST 303
ANGLE CLIPS	2	12	6" x 3 1/2" x 1/4" x 6"	ST 400
#8 SHEAR ANCHOR	SA1	9	#8 REBAR x 0'-7	ST 400
DAMPING SADDLE	DUS-4	1	3'-2 x 3 1/2 x 3/8 x 1'-6 7/8	ST 296
CONNECTION BAR	CB1	2	1" Ø x ' - 3"	ST 400
CONNECTION PLATES	P1	3	3' 2" x 3/16" x 0'-6 1/2"	ST 400
	P2	2	4'-2" x .39" x 0'-9"	ST 400
⚠1	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

NO	DATE	REVISION	BY
⚠3	6-23-69	AS NOTED	GDC
⚠2	2-21-69	AS NOTED	GDC
⚠1	10-8-68	LIST OF MATERIAL	GDC

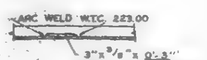


TOP VIEW - DETAIL "A"

DETAIL "A" SECTION D-D

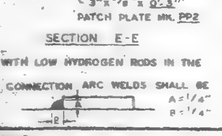


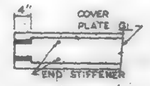
DETAIL "C"



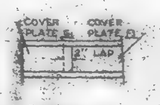
SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.





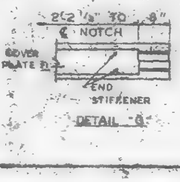
DETAIL "D"



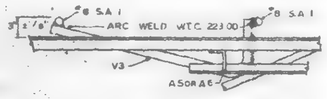
DETAIL "E"

COVER PLATES 29 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

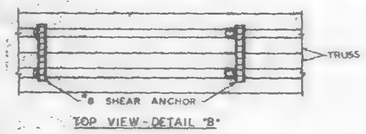


DETAIL "G"



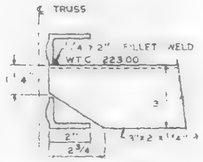
DETAIL "B"

DETAIL "B1"



TOP VIEW - DETAIL "B"

SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF DRWG		
	A84 3.1	1-3 68
	A82 5 & 6	7-22-68
	A84-39-41	1-3 68
S	S1124	1-6 68
	7-A83 2	1-3-68
	7-A81 11 & 12	7-22-68
	7-A82-8	7-22-68
	7-A84 42 & 3	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

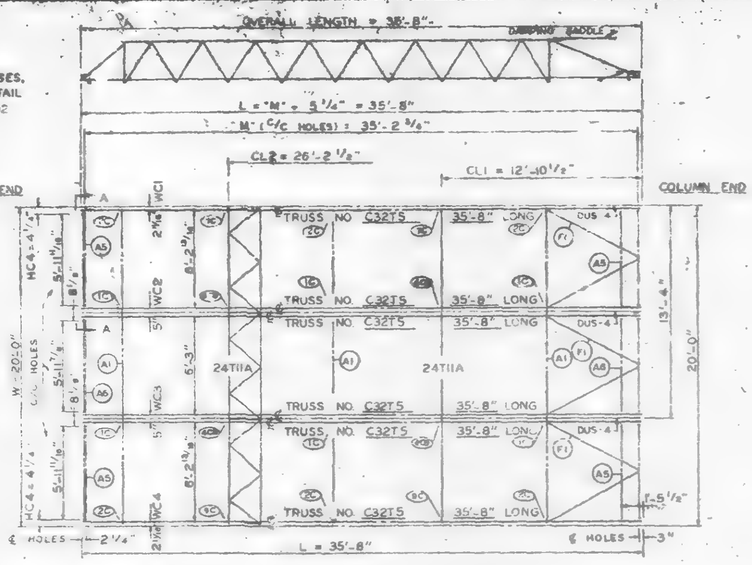
BLDG. A FLOORS 10-24, 26-40 (EAST & WEST) 41-49, 50, 50, 60-66, 68-74 (EAST) PANEL MK° "-9" x 35'-8"

BLDG. B FLOORS 14-24, 26-40 (NORTH & SOUTH) 45-50, 50-66 (NORTH)

FABRICATION BY LACLEDE STEEL COMPANY

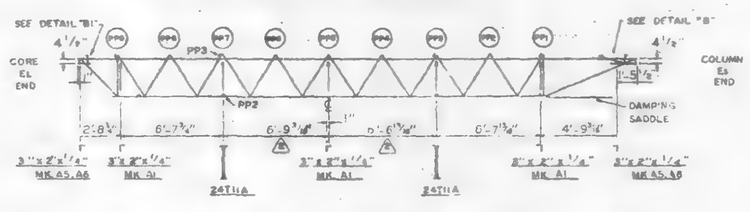
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-18	PLATE
APPROVED FOR FABRICATION BY James W. White	DATE 4/2/70	DRAWN BY [illegible]	
		DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY I.M. CHUNG	
DETAILED BY E. BECKER		DATE APRIL 10, 1968	
		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP-HR1

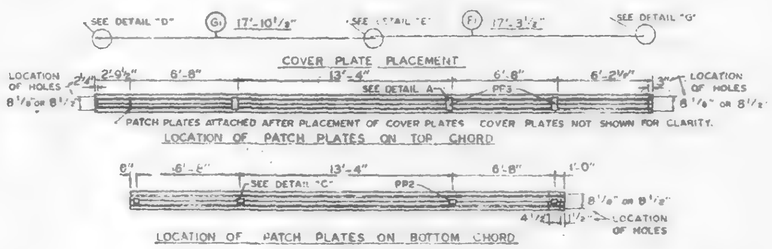
LETTERS AND NUMBERS IN ELLIPSES, IN (A1), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.

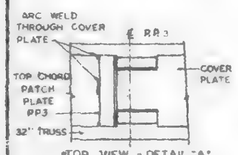


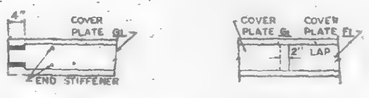
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. H1 SIZE 20'-0" x 35'-8"

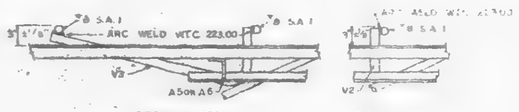


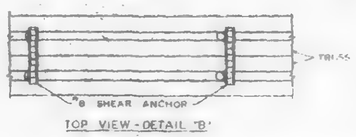






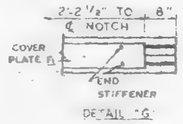
COVER PLATES 28 GA. THICK

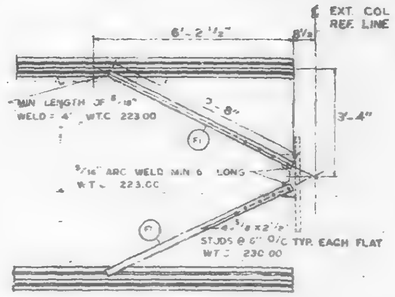




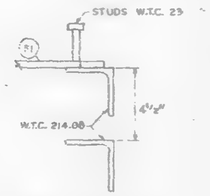
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 8" FULL THROAT FILLET.

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

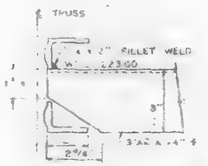




TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	SPEC
FLOOR TRUSSES	T9	18	C42TS - 35'-8"	ST 100
BRIDGING TRUSSES	T1A	2	2TIIA - 18'-11"	ST 100
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4" x 10'-11"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 1/2"	ST 403
	A6	2	3"x2"x1/4"x 6'-1"	ST 403
DIAGONAL FLATS	F1	6	4 1/2"x5/16"x 6'-8"	ST 402
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"	ST 400
	PP2	12	3"x 5/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x.0135"x 17'-10 1/2"	ST 303
	F1	3	7"x.0135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	8"x5"x1/2"x1/4" x 6"	ST 400
8 SHEAR ANCHOR	SA1	9	8 REBAR x 0'-7"	ST 400
DAMPING SADDLE ⚠1	DUS4	3	3 1/2"x 3 1/2"x 5/8"x 3'-8"	ST 298
CONNECTION BAR	CB1	2	1"x 8"x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	3	5"x 3/8"x 0'-6 1/8"	ST 400
	P2	2	4"x .390"x 0'-8"	ST 400
	P7	2	6"x 2"x 1'-0"	ST 400

NO.	DATE	REVISION	BY
3	8-28-68	AS NOTED	DDF
2	2-21-68	AS NOTED	DDF
1	10-10-67	MATERIAL LIST	DDF

⚠2 REF DRWG

1-AB4-31	1-22-68	
7-AB4-18 & 19	7-22-68	
7-AB4-38-41	7-22-68	
SA-124	1-8-68	
7-AB3-2	1-8-68	
7-AB1-11 & 12	7-22-68	
7-AB2-6	7-22-68	
28-AB4-46 & 47	9-11-68	

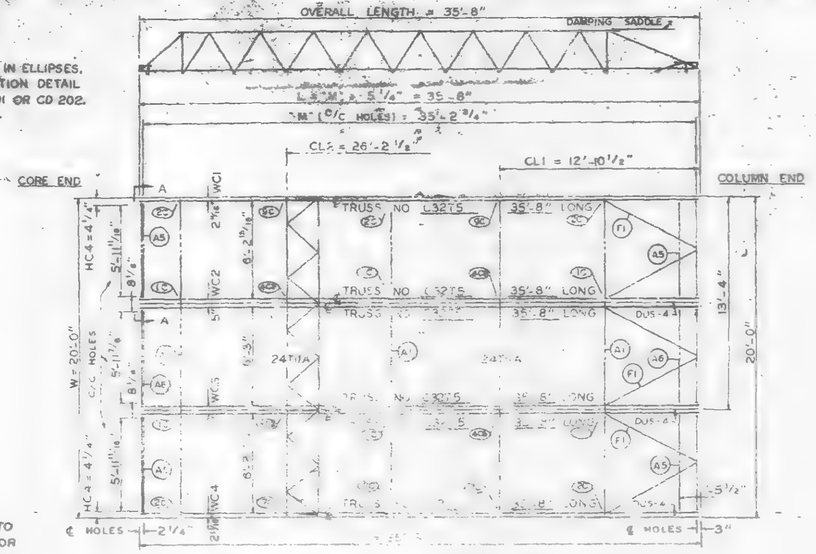
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 28-40, 50-58, 60-66, 68-74, 84-91 &
93-105 (E & W) 45-49 (W) 80-83 (E) PANEL H1

⚠3 BLDG B FLOORS 14-24, 28-40, 50-58, 60-66, 74-84, 91-93-105 (E & W) 45-49 (W) 80-83 (E) PANEL H1

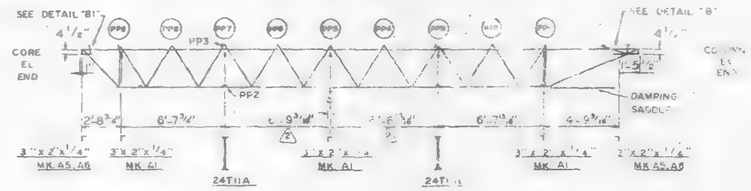
FABRICATION BY LAC EDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-17
APPROVED FOR FABRICATION BY [illegible] FOR PONYA. DATE 1/3/69
DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
CHECKED BY T.M.C. DATE APRIL 10, 1968
LACLEDE STEEL CO.
DETAILED BY A.E. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-H1

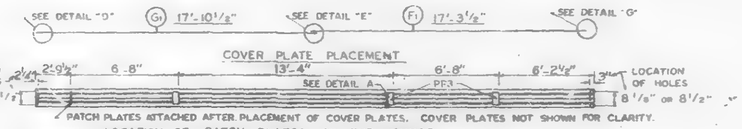
LETTERS AND NUMBERS IN ELLIPSES, & (A5) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

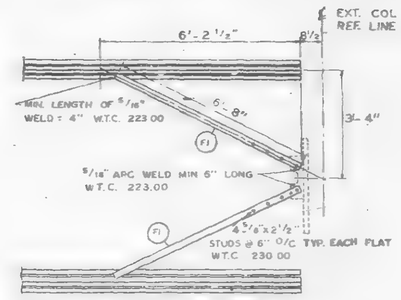


¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.

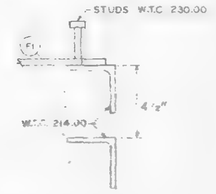
PANEL NO. HR1 SIZE 20'-0" x 35'-8"





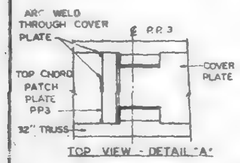


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER [illegible] W.T.C 223.00

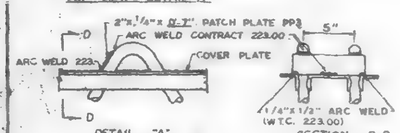


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

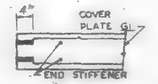
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	GRADE
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST 345
BRIDGING TRUSSES	T11A	2	24T11A - 19'-11"	ST 345
3"x2"x1/4" ANGLE	A1	6	3"x2"x1/4"x 19'-11"	ST 400
	A5	2	3"x2"x1/4"x 6'-2"	ST 400
	A6	2	3"x2"x1/4"x 6'-2"	ST 400
DIAGONAL FLATS	F1	6	1 1/2"x5/8"x 6'-8"	ST 400
PATCH PLATES	PP3	12	8"x1/4"x 0'-7"	ST 400
	PP2	12	5"x5/16"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x0.135"x17'-10 1/2"	ST 303
	F1	3	7"x0.135"x17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	6 1/2"x4 1/2"x3/4"x 6"	ST 400
5/8 SHEAR ANCHOR	SA1		8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS4	3	3 1/2"x1/2"x3/8"x3'-6"	ST 304
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3/8"x3/4"x 0'-6 1/2"	ST 400
	P2	2	4"/8"x.36"x 0'-9"	ST 400
⚠1	P7	2	0'/8"x 1/2"x 1'-0"	ST 401



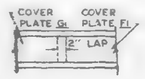
TOP VIEW - DETAIL "A"



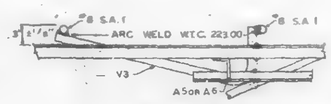
DETAIL "A" SECTION D-D



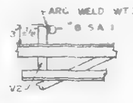
DETAIL "D"



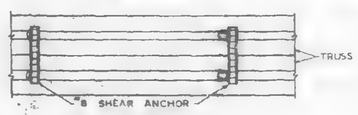
DETAIL "E"



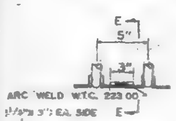
DETAIL "B"



DETAIL "B1"



TOP VIEW - DETAIL "B"



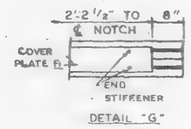
DETAIL "C"

SECTION E-E

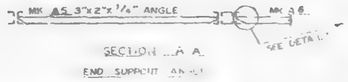
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET. A = 1/4" B = 1/4"

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

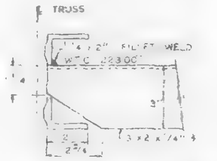
COVER PLATES 12 GA. THICK



DETAIL "G"



SECTION A-A END SUPPORT ANGLE



DETAIL "4" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY
⚠3	6-23-69	AS NOTED	G.D.C.
⚠2	2-21-69	AS NOTED	G.D.C.
⚠1	10-18-68	LIST OF MATERIAL	G.D.C.

REF. DRWG.		
7-AB4-31	1-3-69	
7-AB4-15 & 18	7-22-68	
7-AB4-39-41	1-3-69	
⚠3 SA-124	1-6-69	
7-AB3-2	1-6-68	
7-AB1-11 & 12	7-22-68	
7-AB2-8	7-22-68	
7-AB4-42 & 43	10-15-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR:
PORT OF NEW YORK AUTHORITY

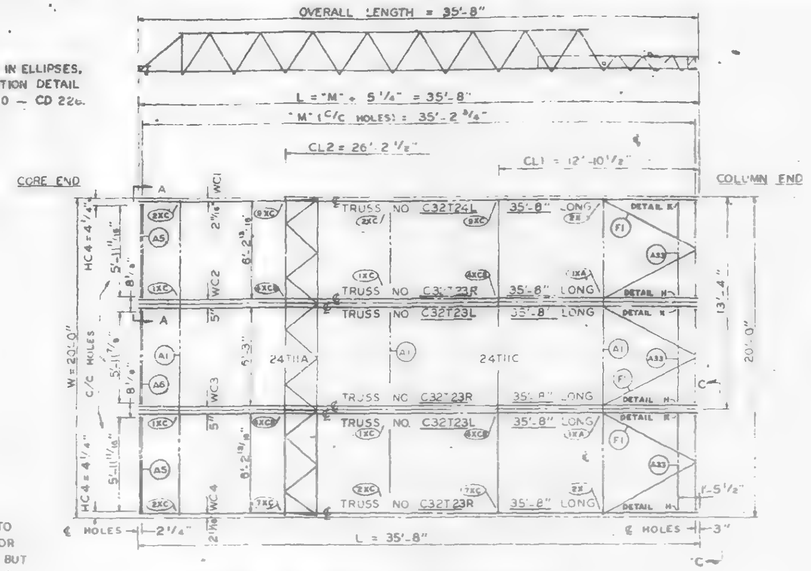
BLDG. A FLOORS 10-24, 26-40 (EAST & WEST) 47-49, 50, 60-66, 68-74 (EAST) PANEL NO. HR1 - 20'-0" x 35'-8"

BLDG. B FLOORS 14-24, 26-40 (NORTH & SOUTH) 45, 46, 50, 60-66

FABRICATION BY LACLEDE STEEL COMPANY

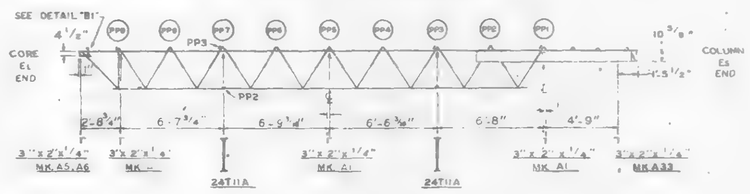
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-18
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 1/24/69	DRAWN BY [illegible] DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE APRIL 10, 1968
DESIGNED FOR [illegible]		FABRICATION CONT. NO. W.T.C. 221

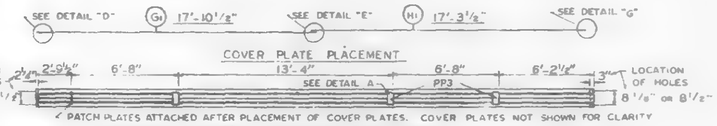
LETTERS AND NUMBERS IN ELLIPSES, (A5) INDICATE CONNECTION DETAIL [illegible] ON SHEET GD 210 – CD 226.



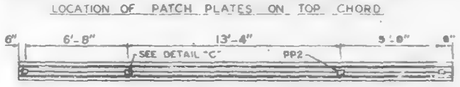
PANEL NO. HR7 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

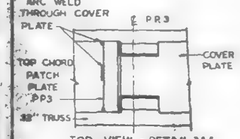




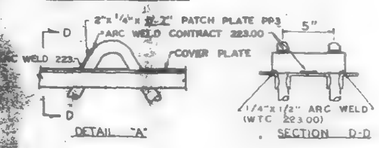
LOCATION OF PATCH PLATES ON TOP CHORD



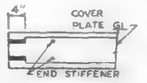
LOCATION OF PATCH PLATES ON BOTTOM CHORD



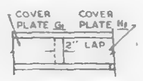
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



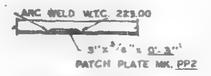
DETAIL "D"



DETAIL "E"

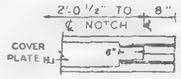
COVER PLATES 29 GA. THICK

DETAIL "C"



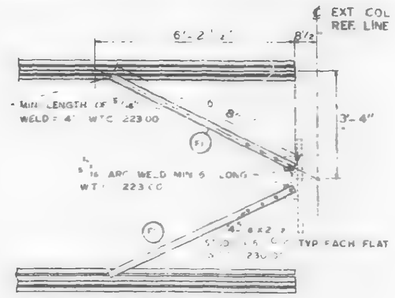
SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

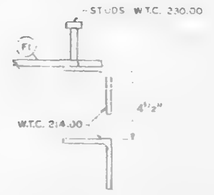


DETAIL "G"

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

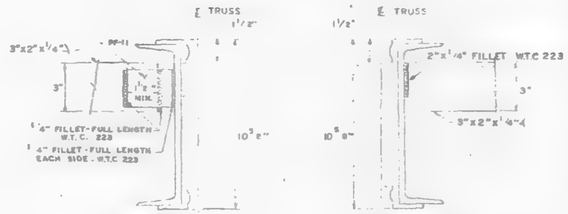


TYPICAL PLAN DETAIL AT END SUPPORT ANGLE ATTACHMENT

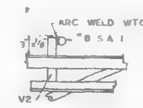


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

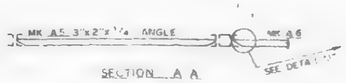
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	℄ WT.
FLOOR TRUSSES	T23L	2	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
	T24L	1	C32T24L - 35'-8"	ST236L
BRIDGING TRUSSES	T11A	1	24TIIA - 19'-11"	ST211A
	T11C	1	24TIIC - 19'-11"	ST211C
3" x 2" x 1/4" ANGLE	A	3	3" x 2" x 1'-4" x 19'-11"	ST 403
	A5	2	3" x 2" x 1'-4" x 6'-8 5/8"	ST 403
	A6	1	3" x 2" x 1'-4" x 6'-2"	ST 403
	A33	3	3" x 2" x 1'-4" x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	12	2" x 1/4" x 0'-7"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	3	7" x .035" x 7'-10"	ST 303
	H1	3	7" x .035" x 7'-3"	ST 303
ANGLE CLIPS	C2	12	2" x 1 1/2" x 1/4" x 6"	ST 400
3/8" SHEAR ANCHOR	SA	3	3/8" REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 8'-8"	ST 402
CONNECTION BAR	CB1	3	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-9"	ST 400
	P7	2	6 1/2" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PH	3	3" x 1'-4" x 0'-2 3/8"	ST 412



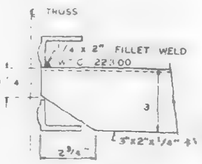
SECTION C-C
END SUPPORT ANGLE



DETAIL "B1"



SECTION A A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DWNG		
	7-AB4-3	10-15-68
	7-AB4-15 & 16	7-26-68
	7-AB4-15 2	10-4-68
	SD-124	3-24-69
	7-AB3-29	10-4-68
	7-AB1-22	10-4-68
	7-AB2-6	7-22-68
	7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C.
FOR
THE PORT OF NEW YORK AUTHORITY

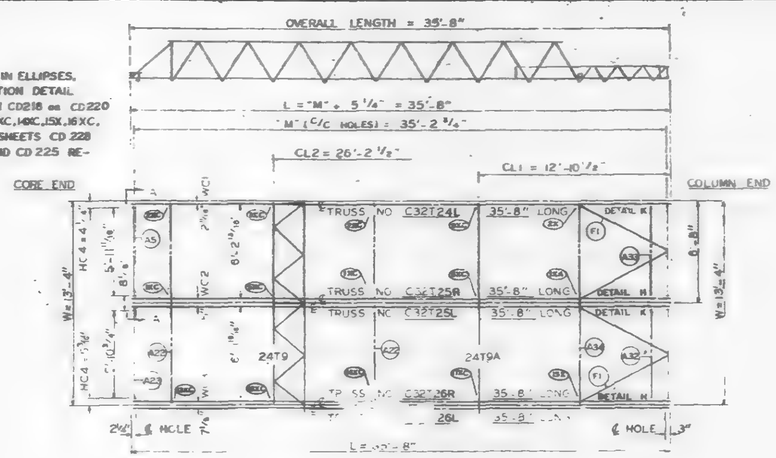
BLDG 5 FLOORS 25,59 & 92 (NORTH & SOUTH)

PANEL HR7 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

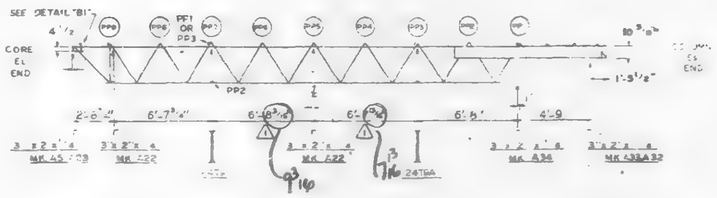
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-39	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 6/6/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.	DATE	CHECKED BY T.M.CHUBA DATE MAY 8, 1969	
DETAILED BY [illegible] WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-HR7

NUMBERS AND NUMBERS IN ELLIPSES, (1),(2), INDICATE CONNECTION DETAIL [illegible] SHEET CD 211 CD218 on CD220 SHEET, CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD 226, CD 210, CD 227, AND CD 225 RESPECTIVELY.

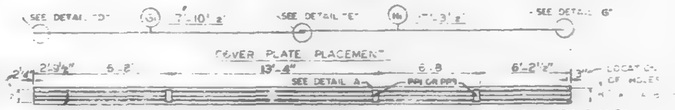


PANEL G2 SIZE 13'-4" x 35'-8"

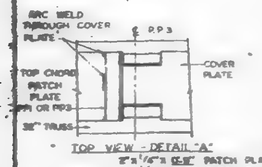
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



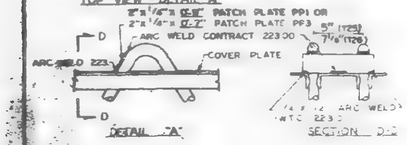
PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25



LOCATION OF PATCH PLATES ON BOTTOM CHORD



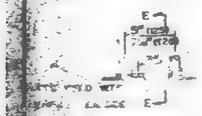
TOP VIEW - DETAIL "A"



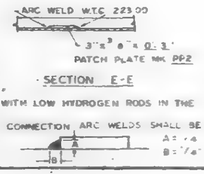
DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

COVER PLATES 29 GA THICK



DETAIL "C"

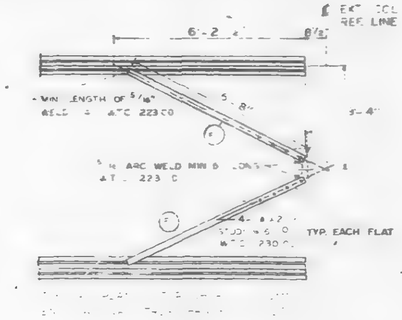


SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

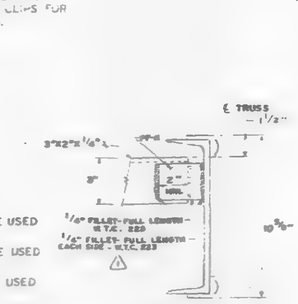
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

DETAIL "G"



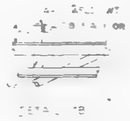
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

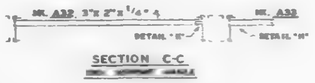
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T24L	1	C32T24L x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26L	1	C32T26L x 35'-8"	ST 226L
	T26R	1	C32T26R x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x 2"x 1/4" x 6'-1 3/4"	ST 403
	A22	2	3"x 2"x 1/4" x 4'-5 1/2"	ST 403
	A23	1	3"x 2"x 1/4" x 6'-1 3/4"	ST 405
	A32	1	3"x 2"x 1/4" x 3'-3 1/2"	ST 410
	A33	1	3"x 2"x 1/4" x 4'-5 1/2"	ST 410
	A34	1	3"x 2"x 1/4" x 13'-8 1/2"	ST 410
PATCH PLATES	PP1	4	2"x 1/4" x 0'-8"	ST 409
	PP3	4	2"x 1/4" x 0'-7"	ST 409
COVER PLATES	G	1	2"x 1/4" x 13'-3 1/2"	ST 409
	G1	1	2"x 1/4" x 13'-3 1/2"	ST 409
	H	1	2"x 1/4" x 13'-3 1/2"	ST 364
	H1	1	2"x 1/4" x 13'-3 1/2"	ST 364
	S1	1	9"x 1/4" x 5'-5 1/2"	ST 363
	S2	1	7"x 1/4" x 5'-5 1/2"	ST 363
ANGLE CLIPS	C1	8	3"x 3" x 3/8" x 35'-6"	ST 400
	SA1	1	FLBAR x 0'-7"	ST 400
SHEAR ANCHOR	SA2	1	FLBAR x 0'-9"	ST 400
DIAGONAL FLATS	F1	4	3"x 3" x 8"x 6'-2"	ST 402
CLOSURE PLATES	PP-1	4	3"x 1/4" x 0'-2 3/4"	ST 412
SPECIAL CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 274
	14XC	1	SEE REF. DRWG.	ST 272
	15X	1	SEE REF. DRWG.	ST 275
	16XC	1	SEE REF. DRWG.	ST 273
	17XC	1	SEE REF. DRWG.	ST 271



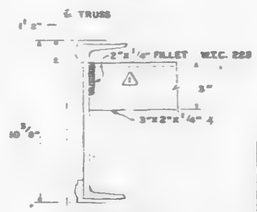
DETAIL "K"

COVER PLATES MK. H, & G, TO BE USED WITH DOUBLE C32T25
COVER PLATES MK. H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26

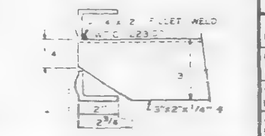




SECTION C-C



DETAIL "H"



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLES

NO.	DATE	REVISION	BY
1	2-4-69	AS NOTED	A.C.

REF DRWG
- AB4-3 10-15-68
- AB4-15 & 16 7-22-68
- AB4-15.2 10-4-68
- SA-24 10-21-68
- AB3-36 10-4-68
- AB1-22 & 23 10-4-68
- AB2-4 7-22-68

SEELYE · MILLE CHRISTIANSEN · ROSSETTI Structural & Civil Engineers
[illegible] STATE OF NEW YORK

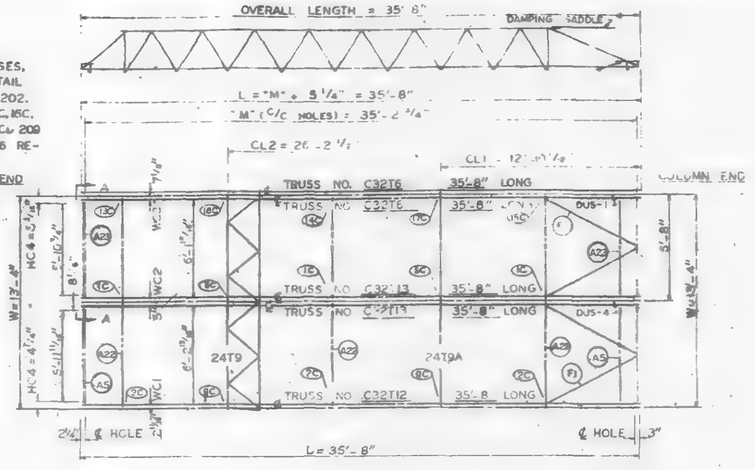
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92 (EAST & WEST)

PANEL G2 - 13'-4" x 35'-8"

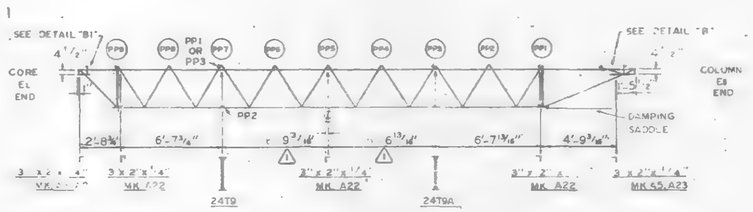
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-36 10-4-68 PLATE
APPROVED FOR FABRICATION DATE
BY FOR P.O.N.Y.A.
DRAWN BY [illegible] DATE JAN 2, 1969
APPROVED FOR FABRICATION DATE
BY FOR FABRICATOR
CHECKED BY T.M. CHIRA DATE JAN 3, 1969
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP-G2

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202. SPECIAL CONNECTIONS 13C, 14C, 15C, 16C, AND 17C ARE SHOWN ON SHEETS CD 209 CD 207, CD 205, CD 208, AND CD 206 RESPECTIVELY.

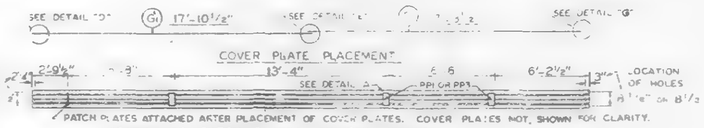


PANEL GR1 SIZE: 13'-4" x 35'-8"

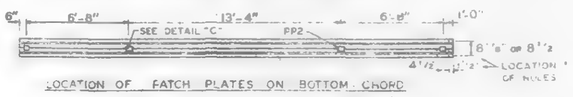
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



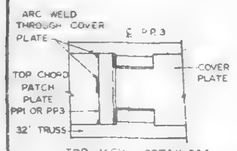
PATCH PLATE MK PP1 TO BE USED WITH DOUBLE C32T6.
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T13.



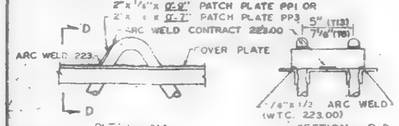
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

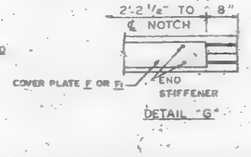
DETAIL "C" SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL T "OAT FILLET.

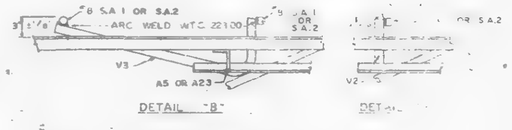
DETAIL "D" DETAIL "E"

COVER PLATES 29 GA. THICK

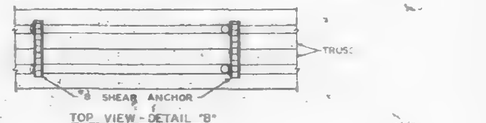
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



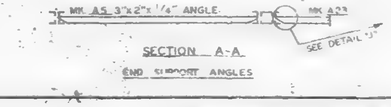
DETAIL "G"



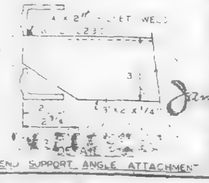
DETAIL "B" DETAIL



TOP VIEW - DETAIL "B"

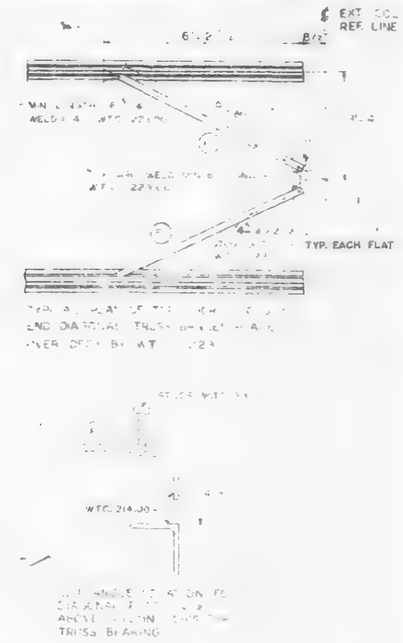


SECTION A-A
END SUPPORT ANGLES



END SUPPORT ANGLE ATTACHMENT

COVER PLATES MK. F1 & G1 TO BE USED WITH DOUBLE C32T13.
COVER PLATES MK. F & G TO BE USED WITH DOUBLE C32T6.
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T13.
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T6.



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG.
TOP CHORD PLATES	T6	2	C32T6 - 35'-8"	ST 206
	T12	1	C32T12 - 35'-8"	ST 212
	T13	2	C32T13 - 35'-8"	ST 213
BRACE PLATES	T9	1	24T9 - 13'-2 3/16"	ST 209
	T9A	1	24T9A - 13'-2 3/16"	ST 209A
ANGLES	A4	2	3 x 2" x 4 x 6'-1 13/16"	ST 403
	A22	2	3 x 2" x 4 x 13'-3 7/8"	ST 405
	A23	2	3" x 2" x 4 x 8'-0 7/8"	ST 405
SEAT ANGLES	A5	4	2" x 4 x 6'-8"	ST 402
PLATES	PP1	4	2" x 4 x 0'-9"	ST 400
	PP2	8	3" x 3/8" x 0'-3"	ST 403
	PP3	4	2" x 1/4" x 0'-7"	ST 400
COVER PLATES	G	1	7" x 0.035 x 17'-0 1/8"	ST 303
	G1	1	7" x 0.035 x 17'-3 1/8"	ST 303
	F	1	9" x .0135" x 17'-10 1/8"	ST 303
	F1	1	8" x .0135" x 17'-3 1/8"	ST 303
ANGLES	C1	4	2" x 1 1/2" x 1/4" x 6"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 6"	ST 400
	B	8	2" x 1 1/2" x 1/4" x 6"	ST 400
	A	3	5/8" ø REBAR x 0'-7"	ST 400
	A1	3	5/8" ø REBAR x 0'-9"	ST 400
	A24	3	3" x 2" x 3/8" x 3'-8 7/8"	ST 298
	A24-1	1	3" x 2" x 3/8" x 3'-6 7/8"	ST 298
MISCELLANEOUS				
	NC		SEE REF. DRWG.	ST 274
SEAT ANGLE CLIPS	AC	1	SEE REF. DRWG.	ST 272
CLIP ANGLES	AC1	1	SEE REF. DRWG.	ST 270
	TC	1	SEE REF. DRWG.	ST 271

(3) 6 CHANGE BECOMES EFFECTIVE AFTER 33rd FLOOR, TOWER A. 66 UP TO FLOOR 33, TOWER A.

NO.	DATE	REVISION	BY
3	6-3-69	AS NOTED	GDC
2	4-8-69	AS NOTED	GDC
1	2-2-69	AS NOTED	GDC

A-3	5 & 16	5
A84-32-4		3
SA	A	10
A83		5
A81-11 & 12		5 10.68
A82-4		4 10.68
A84-42		5 10.68

DETAILS
E R - N. Y. C.
FOR
NEW HK AUTHORITY
P 8-40, 50-58, 60-66, 68-74, 84-91 &
93-100 (EAST & WEST) 73-83 (W) 46-49 (E) PANEL GR1 13'-4" x 35'-8"
(3) BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91 & 93-100 (E&W) 58-60 (E) 75-83 (W) 42-49 (E)

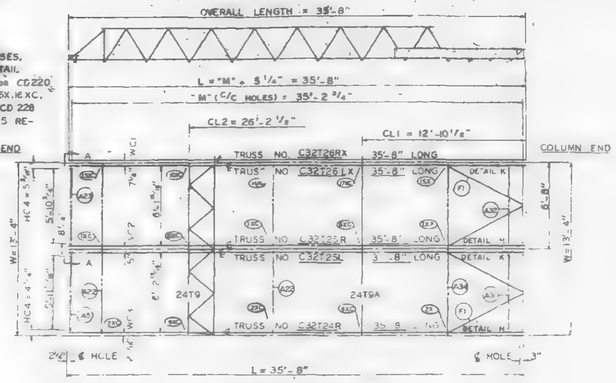
STEEL COMPANY

DESIGN DRAWING NO. A83-10 5-10-68	PLATE
DRAWN BY GWB	
DATE APRIL 10, 1968	
CHECKED BY T.M.CHURA	
DATE APRIL 10, 1968	
FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-GR1

APPROVED BY [illegible] 4/2/69
APPROVED BY [illegible] STEEL CO.
DETAILED BY [illegible]

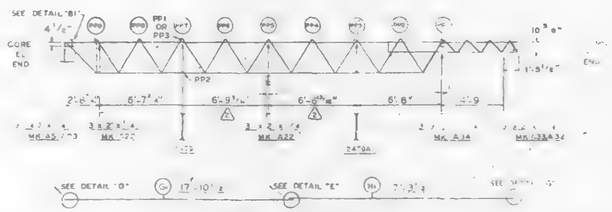
...ERS IN ELLIPSES,
...CAPE CONNECTION DETAIL
...SHEET CD 211 CD218 OR CD220
...SECTIONS J3XC, J4XC, J5X, K4XC,
...ARE SHOWN ON SHEETS CD 228
CD226, CD210, CD227, AND CD225 RE-
SPECTIVELY.

CORE END

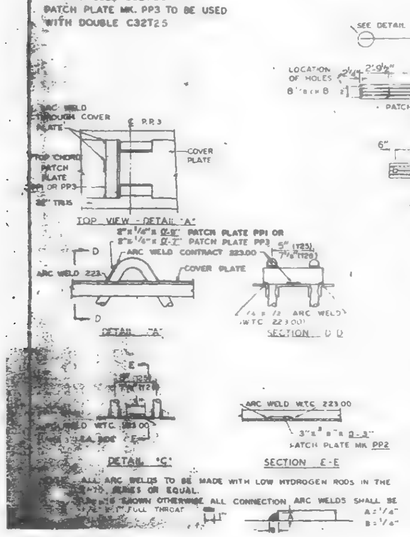


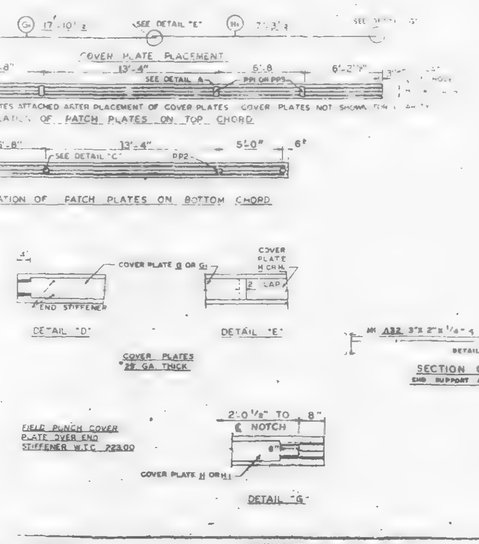
PANEL GR2 SIZE 13'-4" x 35'-8"

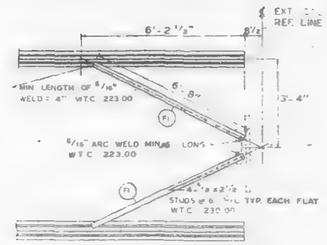
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

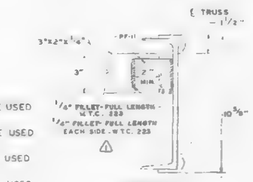


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25

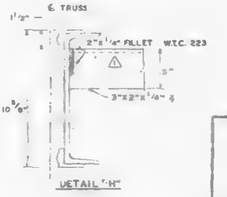








COVER PLATES MK H, & G, TO BE USED WITH DOUBLE C32T25
COVER PLATES MK H & G TO BE USED WITH DOUBLE C32T26
SHEAR ANCHOR MK. SA1 TO BE USED WITH DOUBLE C32T25
SHEAR ANCHOR MK. SA2 TO BE USED WITH DOUBLE C32T26



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF DRWG
FLOOR TRUSSES	T24	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX	1	C32T26LX x 35'-8"	ST 226L
	T26RX	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/8"	ST 209
	T9A	1	24T9A x 13'-2 3/8"	ST 209A
3"x 2"x 1/4" ANGLE	A5	1	3"x 2"x 1/4" x 2'-8"	ST 403
	A22	2	3"x 2"x 1/4" x 13'-3 1/2"	ST 403
	A23	1	3"x 2"x 1/4" x 2'-8"	ST 405
	A32	1	3"x 2"x 1/4" x 1'-8"	ST 410
	A33	1	3"x 2"x 1/4" x 1'-10"	ST 410
	A34	1	3"x 2"x 1/4" x 13'-8"	ST 410
PATCH PLATES	PP1	4	2'-6" x 4'-0"	ST 400
	PP2	8	3"x 8" x 0'-3"	ST 400
	PP3	4	2'-6" x 4'-0"	ST 400
COVER PLATES	G	1	3"x 8" x 13'-3"	ST 404
	G1	1	3"x 8" x 13'-3"	ST 404
	H	1	3"x 8" x 13'-3"	ST 404
	H1	1	3"x 8" x 13'-3"	ST 404
ANGLE CLIPS	C1	8	3"x 3" x 5/16" x 4"	ST 400
	C2	8	3"x 3" x 5/16" x 8"	ST 400
½" SHEAR ANCHORS	SA1	1	HEBAS 10 x 3	ST 401
	SA2	1	HEBAS 10 x 3	ST 401
PLATES	P1	1	3"x 8" x 0'-3"	ST 404
	P2	1	3"x 8" x 0'-3"	ST 404
PERIMETER CONNECTION UNITS	13XC	1	SEE REF. DRWG.	ST 213
	14XC	1	SEE REF. DRWG.	ST 214
	15X	1	SEE REF. DRWG.	ST 215
	16XC	1	SEE REF. DRWG.	ST 216
	17XC	1	SEE REF. DRWG.	ST 217

NO	DATE	REVISION	BY
3	3-11-69	AS NOTED	G.D.C
2	2-4-69	AS NOTED	G.D.C

REF DRWG		
	A8-1	10-15-68
	7-A84-5 & 6	7-22-68
	7-A84-15.2	10-4-68
	SA-24	10-11-38
	7-A83-37	10-4-68
	7-A81-22 & 23	10-4-68
	7-A82-4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

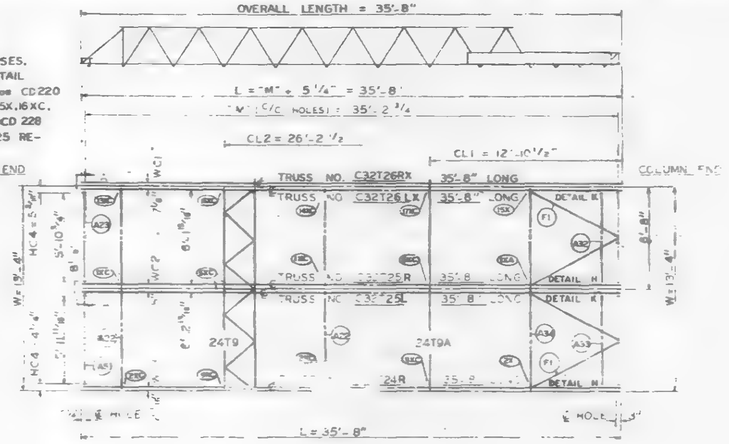
BLDG A FLOORS 25, 59, 92 (EAST & WEST)

PANEL GR2 - 13'-4" x 35'-8"

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7-A83-32 10-4-68 PLATE
APPROVED FOR FABRICATION BY	DATE 3/24/69	DRAWN BY	DATE JAN 2, 1968
APPROVED FOR FABRICATION BY	DATE	CHECKED BY	DATE JAN 3, 1968
DETAILED BY		FABRICATION CONT NO W.T.C.	SHEET NO FP-1

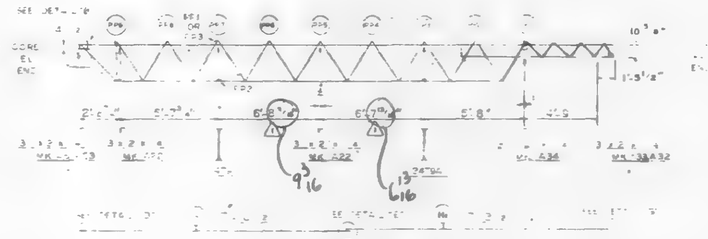
ENGINEER

LETTERS AND NUMBERS IN ELLIPSES, (e.g. A22), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 211 CD218 OR CD220
SPECIAL CONNECTIONS 13XC, 14XC, 15X, 16XC, AND 17XC ARE SHOWN ON SHEETS CD 228 CD226, CD210, CD227, AND CD225 RESPECTIVELY.

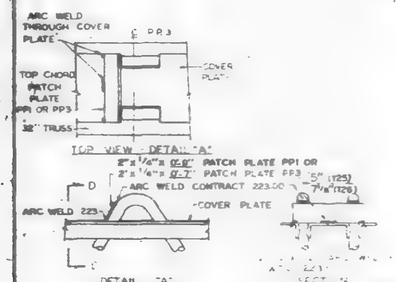


PANEL GR2 SIZE 13'-4" x 35'-8"

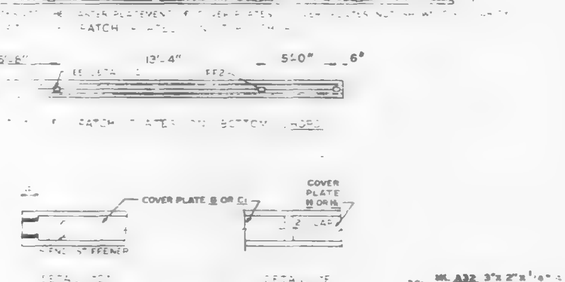
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

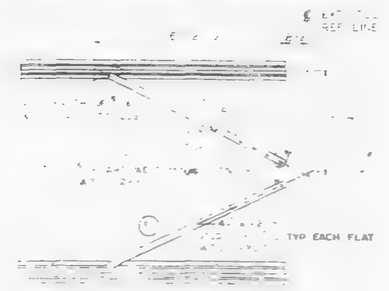


PATCH PLATE MK. PP1 TO BE USED WITH DOUBLE C32T26
PATCH PLATE MK. PP3 TO BE USED WITH DOUBLE C32T25



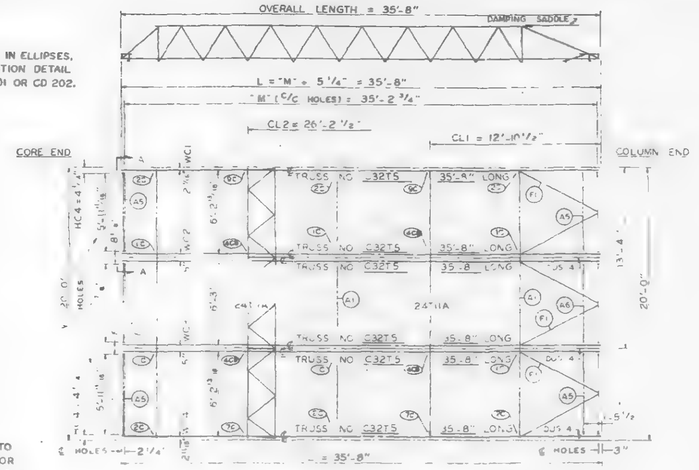
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/16" x 1" FULL THROAT FILLET.





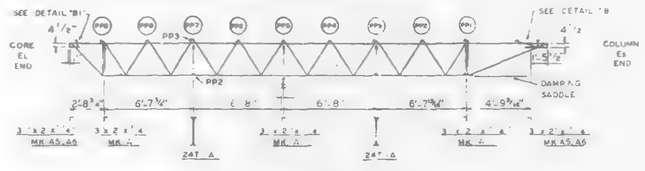
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T24R	1	C32T24R x 35'-8"	ST 224L
	T25L	1	C32T25L x 35'-8"	ST 225L
	T25R	1	C32T25R x 35'-8"	ST 225L
	T26LX ⚠1	1	C32T26LX x 35'-8"	ST 226L
	T26RX	1	C32T26RX x 35'-8"	ST 226L
BRIDGING TRUSSES	T9	1	24T9 x 13'-2 3/4"	ST 209
	T9A	1	24T9A x 13'-2 3/4"	ST 209A
3"x2"x1/4" ANGLE	A5	1	3"x2"x1/4" x 6'-10"	ST 403
	A22	1	3"x2"x1/4" x 13'-3"	ST 403
	A23	1	3"x2"x1/4" x 6'-8"	ST 403
	A32	1	3"x2"x1/4"x5'-10"	ST 403
	A33	1	3"x2"x1/4"x5'-10"	ST 403
	A34	1	3"x2"x1/4"x13'-4"	ST 403
	A35	1	3"x2"x1/4"x13'-4"	ST 403
	FE1	4	3"x1/4"x10'-8"	ST 400
SHEAR PLATES	SA1	1	3"x1/4"x10'-8"	ST 400
	SA2	1	3"x1/4"x10'-8"	ST 400
	H	1	3"x1/4"x13'-4"	ST 400
	H1	1	3"x1/4"x13'-4"	ST 400
COVER PLATES	B	1	3"x1/4"x13'-4"	ST 403
	C1	1	3"x1/4"x13'-4"	ST 403
	M	1	3"x1/4"x13'-4"	ST 403
	M1	1	3"x1/4"x13'-4"	ST 403
	G	1	3"x1/4"x13'-4"	ST 403
	G1	1	3"x1/4"x13'-4"	ST 403
ANGLE STIFFENER	ST	8	3"x3"x5/16"x10'-8"	ST 400
	ST1	4	3"x3"x5/16"x10'-8"	ST 400
	ST2	4	3"x3"x5/16"x10'-8"	ST 400
	ST3	4	3"x3"x5/16"x10'-8"	ST 400

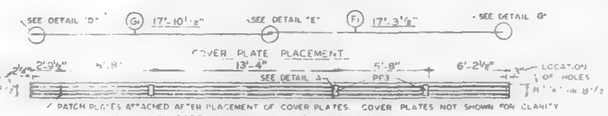
LETTERS AND NUMBERS IN ELLIPSES, ie (A5), INDICATE CONNECTION DETAIL SHOWN ON SHEET CO 201 OR CO 202.

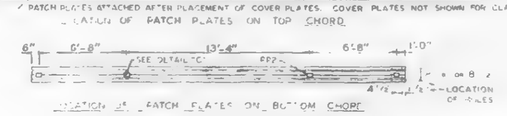


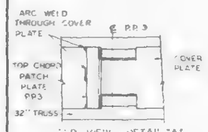
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. HR1 SIZE 20'-0" x 35'-8"

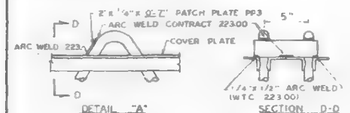




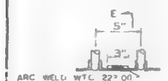




TOP VIEW - DETAIL "A"



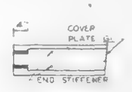
DETAIL "A" SECTION D-D



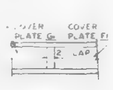
DETAIL "C"

SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



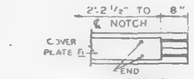
DETAIL "D"



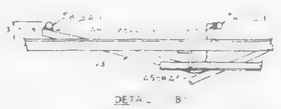
DETAIL "E"

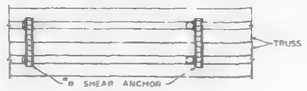
COVER PLATES 22 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER WTC 22300

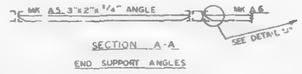


DETAIL "G"

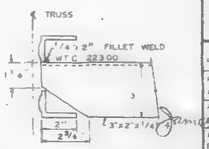




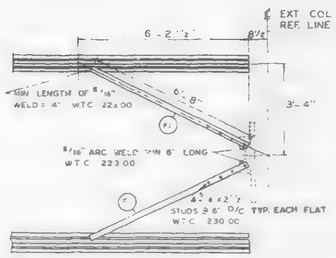
TOP VIEW - DETAIL "B"



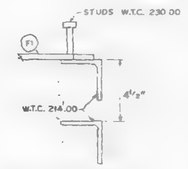
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 22300



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	BT211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1'-4"x19'-11"	ST 403
	A5	4	3"x2"x1'-4"x 8'-5 13/16"	ST 403
	A6	2	3"x2"x1'-4"x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	1'-2 1/2"x 8'-6"x 6'-8"	ST 402
PATCH PLATES	PP3	12	2"x 1'-6"x 0'-7"	ST 400
	PP2	12	3"x 3'-8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST 303
	F1	7	7"x 0.135"x 17'-3 1/8"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x 1'-1"x 1'-4" x 8"	ST 400
3/4" ℄ SHEAR ANCHOR	SA1	3	3/4" ℄ REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	3	3"x6"x 3"x2"x 3/8"x 3 6 3/8"	ST 298
CONNECTION BAR	CB1	2	1" x 8" x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3"x 8"x 0'-1 1/2"	ST 400
	P2	2	4"x 8" x .39"x 0'-9"	ST 400
⚠	P7	2	1'-2" x 1'-2" x 1'-0"	ST 401

NO.	DATE	REVISION	BY
⚠	10-16-68	LIST OF MATERIAL	QQC

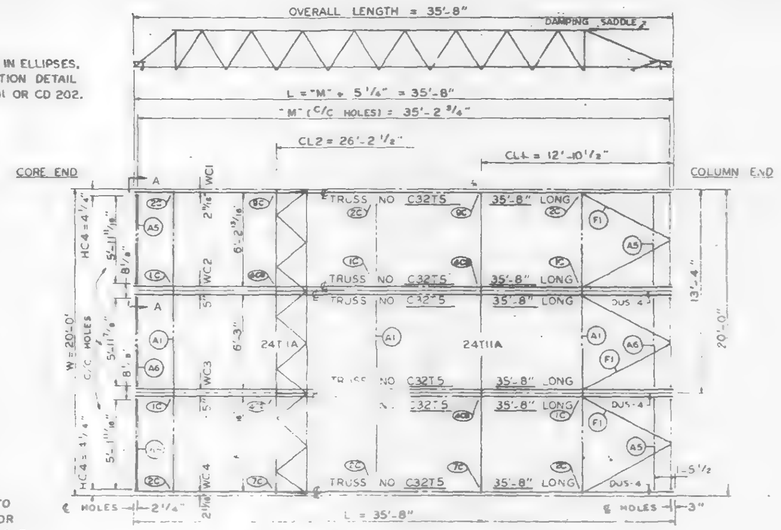
WEB ANGLES
A94 3 & 31 1-3-68
A94 5 & 16 5-8-68
A94 39 41 1-3-68
[illegible] 1-3-68
[illegible] 5-8-68
A94 [illegible] 4-4-68

PRECAST CONCRETE PANEL DETAIL
FOR
ACADEMY TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40 (EAST & WEST) 46-49, 50-58, 60-66.
68-74 (EAST) PANEL HR1 - 20'-0" x 35'-8"

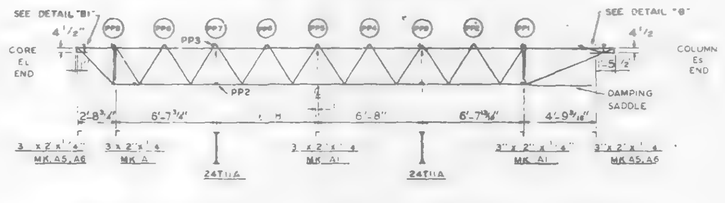
FABRICATION BY ACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR PUNTA — DATE 10/2/68
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR — DATE
DETAILED BY A.C. WEBER
DESIGN DRAWING NO. 7 A83-18 5-10-66 PLATE
DRAWN BY B.S. DATE APRIL 10, 1968
CHECKED BY T.M. CHURA DATE APRIL 10, 1968
FABRICATION CONT NO. WTC 221
SHEET NO. FP-HR1

LETTERS AND NUMBERS IN ELLIPSES, ie. (2E), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

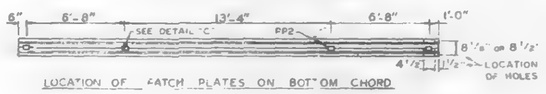
PANEL NO HR1 SIZE 20'-0" x 35'-8"



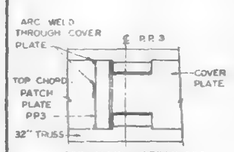
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

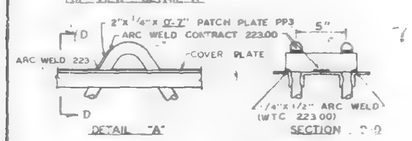
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



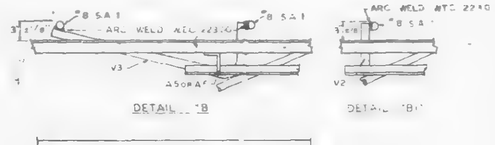
TOP VIEW - DETAIL "A"



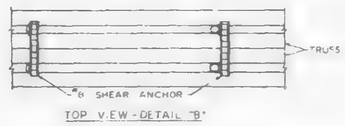
DETAIL "A" SECTION C-C

DETAIL "D" DETAIL "E"

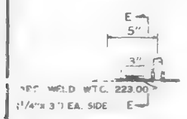
COVER PLATES 29 GA THICK



DETAIL "B" DETAIL "B"



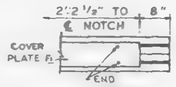
TOP VIEW - DETAIL "B"



DETAIL "C"

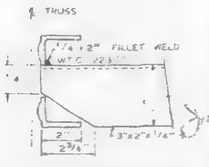
SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



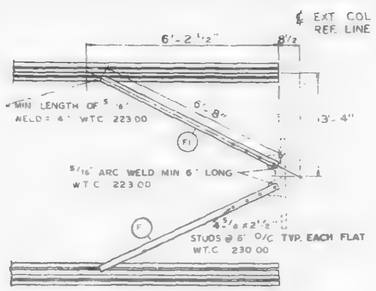
DETAIL "G"

SECTION A-A
END SUPPORT ANGLES

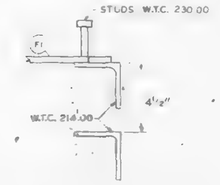


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

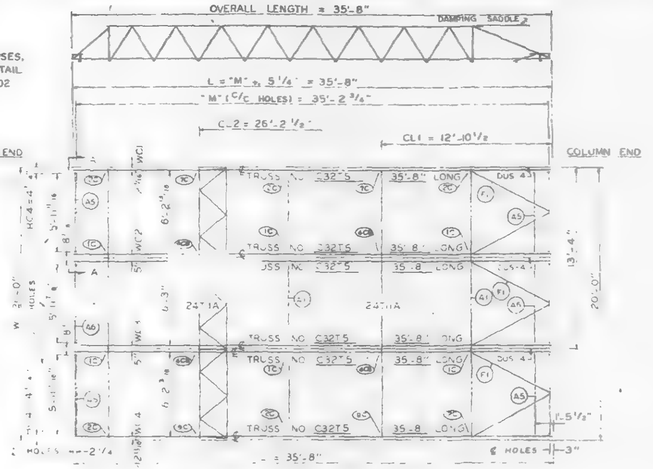
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T5	6	C32T5 - 35' 8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	4	3"x2"x1/4"x 6'-[illegible]"	ST403
	A6	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F	5	2"x[illegible]"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"	ST400
	PP2	12	3"x1/8"x 0'-3"	ST400
COVER PLATES	[illegible]	3	[illegible] x 0'-3 1/2"	ST303
	F	5	7" x 0'-3 1/2" x 7'-3 1/2"	ST303
ANGLE [illegible]	C2	6	2 1/2" x 1 1/2" x 1/4" x 6"	ST400
#8 SHEAR ANCHOR	SA1	4	#8 REBAR x 0'-7"	ST400
DAMPING SADDLE	DUS 4	3	1" x 3" x 1/8" x 6'-8"	ST298
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"	ST400
CONNECTION PLATES	P1	1	3'-7" x 8" x C.6.2"	ST400
	P2	4	4'-2" x .39" x 0'-9"	ST400
	P3	2	4'-2" x .39" x 1'-0"	ST400

[illegible] 5 6 [illegible]
[illegible] 1 5 8
[illegible] 5 [illegible]

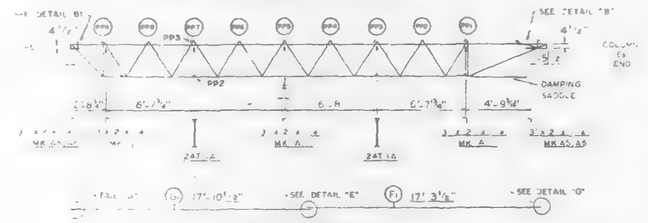
[illegible] FLOORS NO 24, 26, 30 EAST & WEST 46-48, 50-58, 60-66, 68-74 (EAST) PANEL HR1 20'-0" x 35'-8"

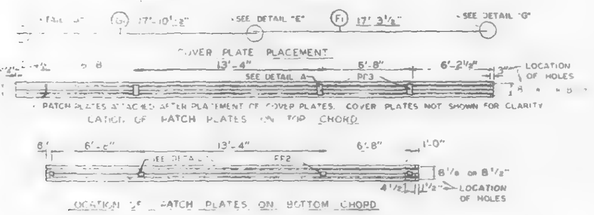
FABRICATION BY [illegible] FOR STEEL
FABRICATED [illegible]
AT MADISON [illegible]
APPROVED FOR FABRICATION [illegible] DATE 8/16/68
APPROVED FOR FABRICATION [illegible] DATE [illegible]
DETAILED BY A. C. WEBER [illegible] 22 FP-HR1

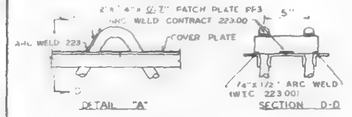
LETTERS AND NUMBERS IN ELLIPSES, ie (C2), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.

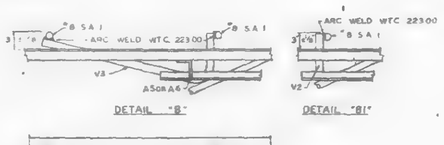


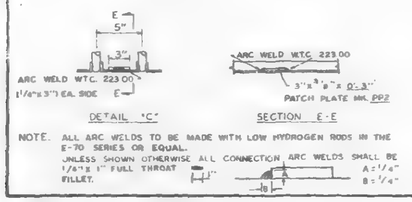
PANEL NO H1 SIZE 20'-0" x 35'-8"



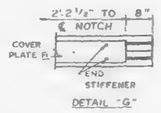


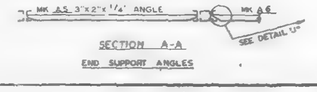


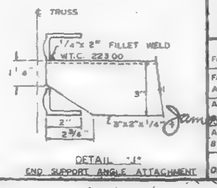


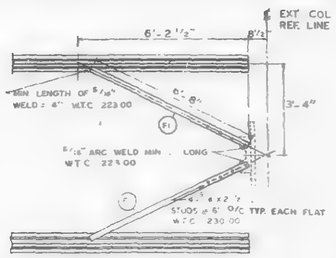


NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/8"x 1" FULL THROAT FILLET.

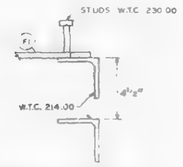








TYPICAL PLAN OF W 12 CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WT. 223.00.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 10'-1"	ST403
	A5	4	3"x2"x1/4"x 6'-1 3/8"	ST403
	A6	2	3"x2"x1/4"x 8'-3"	ST403
DIAGONAL FLATS	F1	6	1' 2"x 5/8"x 8'-8"	ST402
PATCH PLATES	PP3	10	2' x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0.135"x 17'-10 1/2"	ST 303
	F1	3	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x 1/2"x 8 1/4" x 8"	ST 400
3/4" ø SHEAR ANCHOR	SA1	9	3/4" ø REBAR x 0'-7"	ST 400
DAMPING SADDLE ⚠1	DUS 4.5	3	3 1/2"x 3'-2"x 3/8"x 6'-8"	ST298
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES ⚠1	P1	3	3'-2"x 3/8"x 0'-6 1/2"	ST 400
	P2	2	4'-2"x .30"x 0'-9"	ST 400
	P3	2	6 1/2"x 1/2"x 1'-0"	ST 401

NO	DATE	REVISION	BY
⚠1	10-18-88	MATERIAL LIST	G.D.C.

REF. DRWG.		
7-AB4-2 & 3.1	1-3-88	
7-AB4-15 & 16	5-6-88	
7-AB4-39-41	1-3-88	
SA-124	10-20-87	
7-AB3-2	1-3-88	
7-A91-11 & 12	5-10-88	
7-AB2.5	2-15-88	
7-AB4-42	4-1-88	

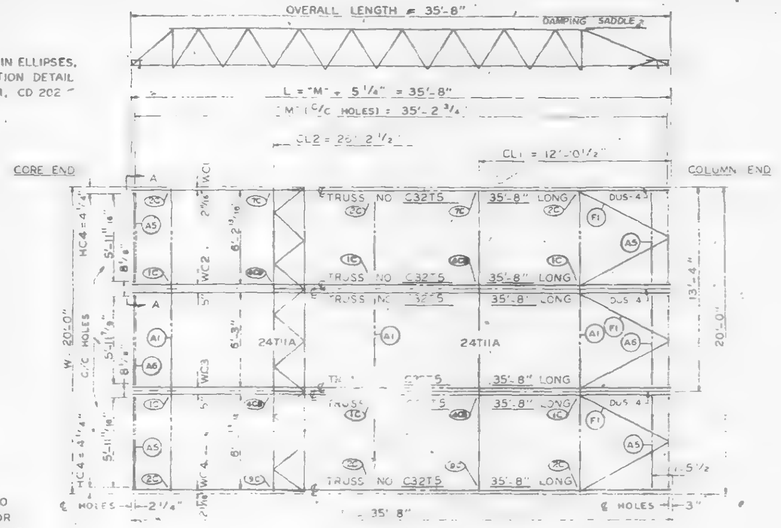
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL H1 - 20'-0" x 35'-8"
45-49 (WEST) 80-83 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-17 5-10-88 PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 10/24/88
DRAWN BY [illegible]
DATE APRIL 10, 1988
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHUBA
DATE APRIL 10, 1988
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO FP-H1

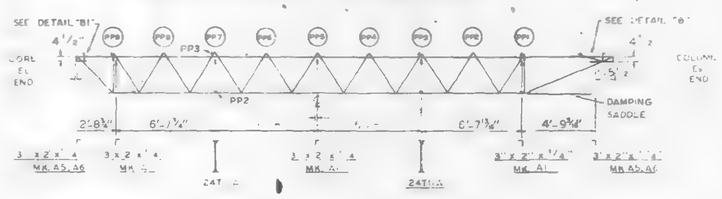
LACLEDE STEEL CO.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201, CD 202 OR CD 203.

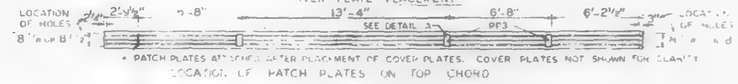


PANEL NO HI SIZE 20'-0" x 35'-8"

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

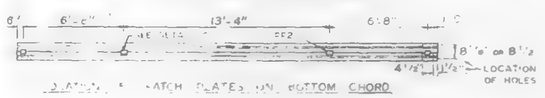


COVER PLATE PLACEMENT

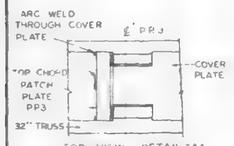


* PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

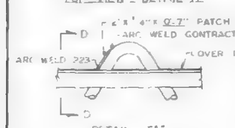
LOCATION OF PATCH PLATES ON TOP CHORD



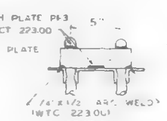
2 ATTACH PATCH PLATES ON BOTTOM CHORD



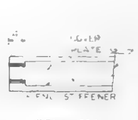
TOP VIEW - DETAIL "A"



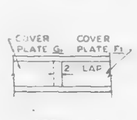
DETAIL "A"



SECTION

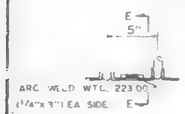


DETAIL "D"



DETAIL "E"

COVER PLATES 29 GA THICK

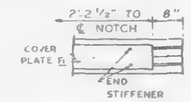


DETAIL "C"

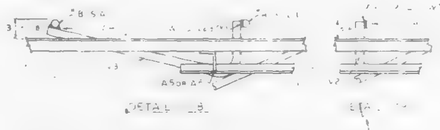
SECTION E-E

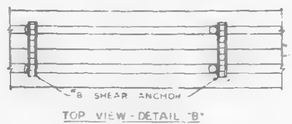
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD WELDING COVER PLATE OVER END STIFFENER WTC 223.00



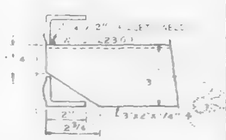
DETAIL "G"



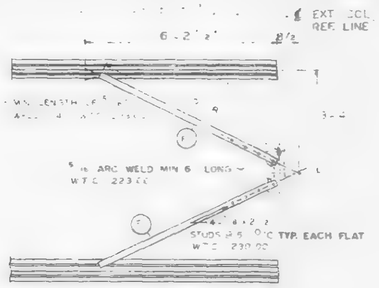


TOP VIEW - DETAIL "B"

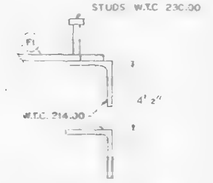
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLATED OVER DECK BY WTC 224.0



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" x 2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-1"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST403
	A6	2	3"x2"x1/4"x 6'-2"	ST403
DIAGONAL FLATS	F	6	1 1/2" x 5" x 0'-8"	ST402
PATCH PLATES	PP3	10	2" x 1'-4" x 0'-7"	ST 400
	PP2	2	3" x 3'-8" x 0'-3"	ST 400
COVER PLATES	F1	1	7" x 0'-3 5/8" x 7'-10 1/2"	ST 303
	F2	1	7" x 0'-3 5/8" x 7'-3 1/2"	ST 303
ANGLE CLIP	C4	12	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
"B" SHEAR ANCHOR	SA1	9	"B" REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS 4	4	3" x 3" x 2" x 3/8" x 0'-8 3/8"	ST298
[illegible]	C8	2	"C" x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3'-8" x 3/8" x 0'-6 1/8"	ST 400
	P2	2	4'-2" x .39" x 0'-9"	ST 400
	P3	2	4'-2" x .39" x 1'-0"	ST 400

REF DRWG	
ST 303 & 5	1 68
ST 304 & 5	5 6 68
ST 304 3/4	3 68
ST 304	2 20 5
ST 401	1 5 68
ST 401A	5 10 68
ST 402	4 15 68
ST 404 & 5	1 68

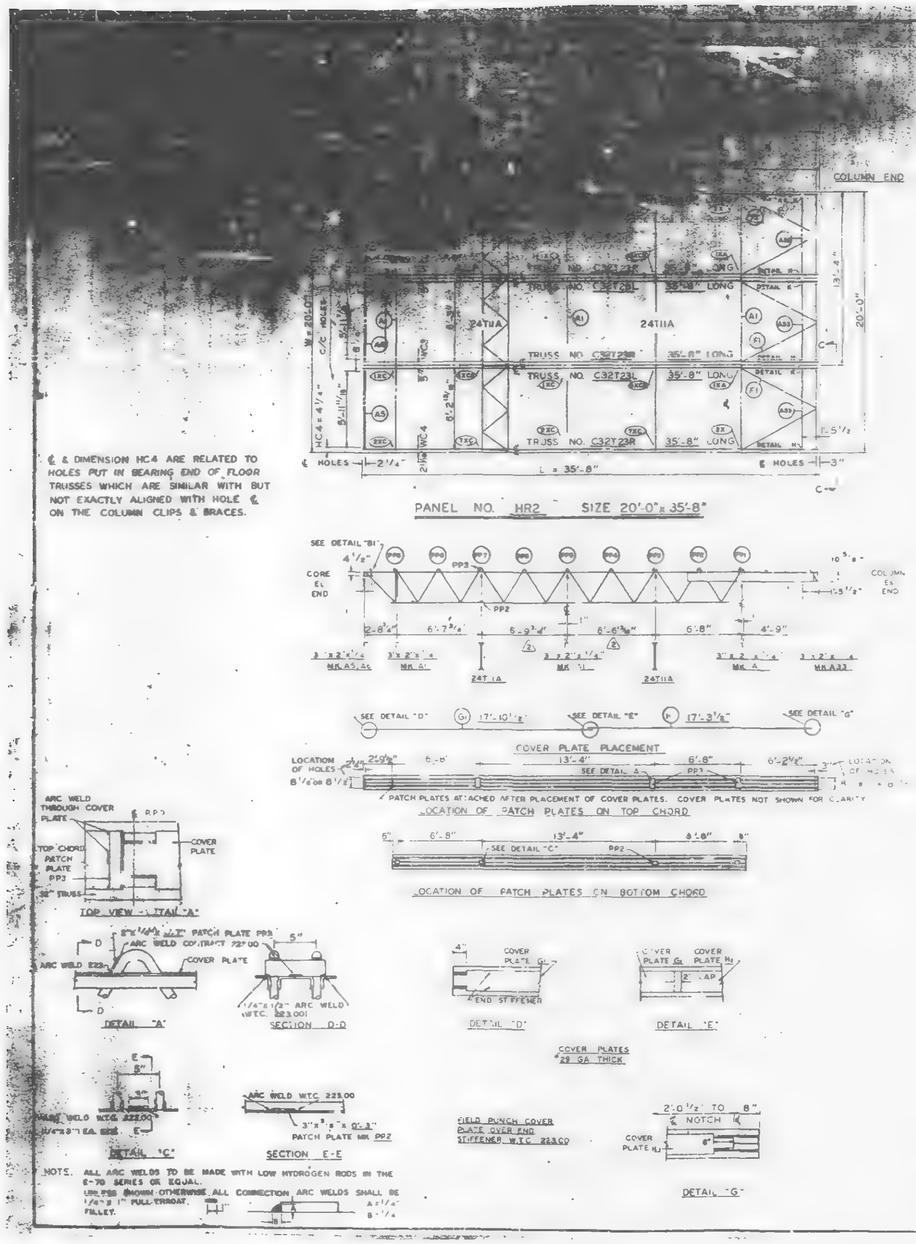
PANEL DETAILS FOR TRUSS CUTTER LIST FOR THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL HI 20'-0" x 35'-8"

45-49 (WEST) 80-83 (EAST)

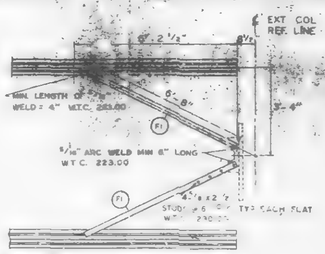
FABRICATION BY "ACLEDE" STEEL COMPANY

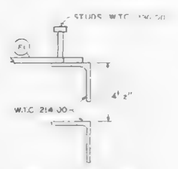
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 AB3 17 F30 68 PLATE	
APPROVED FOR FABRICATION BY [illegible] FOR PORT AUTH	DATE 8/19/68	DRAWN BY S.B. DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-HI



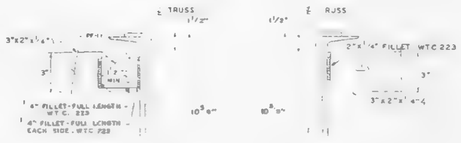
℄ & DIMENSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

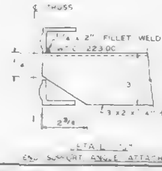
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
USE FSS UNLESS OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 8" FULL THROAT.





BRIDGING				
3"x2"x1/4" ANGLE	A1	8		
	A5	6		
	A6	1		
	A33	4	3"x2"x1/4" x 0'-4"	ST 400
PATCH PLATES	PP3	2	2"x1/4"x 0'-7"	ST 400
	PP2	12	3"x3/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7"x 0.135"x 17'-10 1/2"	ST 303
	H1	3	7"x 0.135"x 17'-3 1/2"	ST 303
CLIPS	C4	12	2"x 2"x 1/4" x 8'-0"	ST 400
7/8" ø SHEAR ANCHOR	SA1	3	7/8" ø REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/8" x 8" x 4'-8"	ST 412
CONNECTION BAR	CB1	3	1" @ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .38" x 0'-9"	ST 400
	P7	2	6 1/2" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PP11	3	3"x1/4" x 0'-2 3/8"	ST 412





DETAIL "K" SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLES

SECTION C-C END SUPPORT ANGLE

DETAIL "B"

DETAIL "L" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
2	3-11-69	AS NOTED	G.D.C
1	2-5-69	AS NOTED	G.D.C

REF. DRWG

-AB4-3	10-8-68
-AB4-15 & 16	7-22-68
-AB4-15 2	10-4-68
SA-124	10-11-68
7-AB3-39	10-4-68
7-AB1-22	10-4-68
7-AB2-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)

PANEL HR2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB3-32 PLATE

APPROVED FOR FABRICATION DATE 3/26/69 FOR PONA

DRAWN BY [illegible] DATE JAN 2, 1969

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

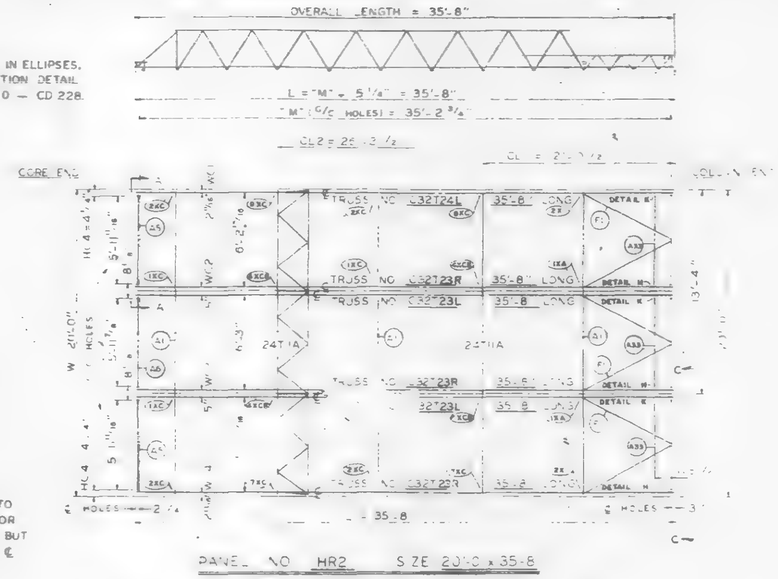
CHECKED BY T.M.GHUBA DATE JAN 3, 1969

DETAILED BY A.C. WEBER

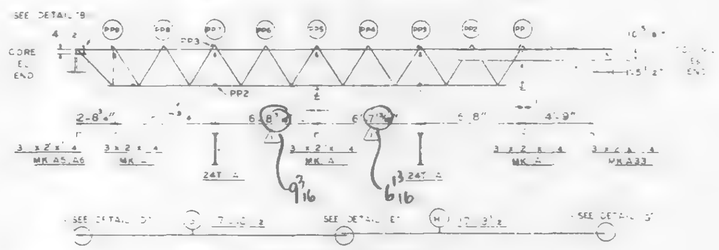
FABRICATION CONT NO W.T.C. 221

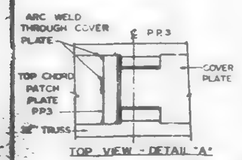
SHEET NO FP-HR2

LETTERS AND NUMBERS IN ELLIPSES, ie. (HC4), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

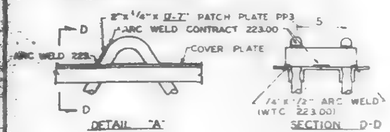


PANEL NO HR2 SIZE 20'-0" x 35'-8"





TOP VIEW - DETAIL "A"



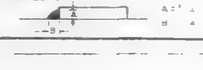
DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

COVER PLATES 1/2" GR THICK

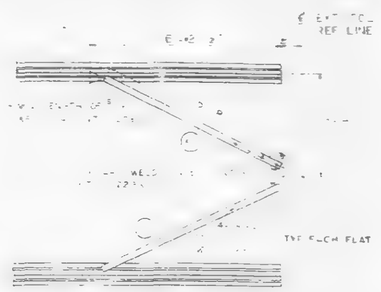
DETAIL "C" SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.



FIELD PLACED COVER PLATE OVER END STIFFENER W.T.C 223.00

DETAIL "G"

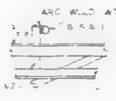


E DIAGONAL LOCATION FOR E DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING

DETAIL "K" END SUPPORT ANGLE ATTACHMENT

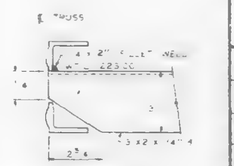
DETAIL "M" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE



DETAIL "B"

END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	2	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST 223L
	T24L	1	C32T24L - 35'-8"	ST 224L
BRIDGING TRUSSES	T11A	2	24T11A - 18'-11"	ST211A
3"x 2"x 5/16" ANGLE	A1	3	3"x2"x1'-4"x 19'-11"	ST 403
	A5	2	3"x2"x1'-4"x 8'-[illegible]"	ST 403
	A6	1	3"x2"x1'-4"x 8'-2"	ST 403
	A33	3	3"x2"x1'-4"x 5'-10 1/8"	ST 410
PATCH PLATES	PP3	12	7"x1'-4"x 0'-7"	ST 400
	PP2	12	3"x 3 8"x 0'-3"	ST 400
COVER PLATES	G	3	[illegible] x 0'-35" x 17'-10 1/2"	ST 303
	H	3	7" x 0'-35" x 17'-3 1/2"	ST 303
ANGLE CLIP	C2	12	2 1/2" x 1 1/2 x 1'-4" x 6"	ST 400
[illegible]	C3	3	[illegible] 8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 3/8" x 8'-8"	ST 402
[illegible]	C8	3	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3 1/2" x 3'-6" x 0'-6 1/8"	ST 400
	P2	2	6 1/8" x .36" x 0'-9"	ST 400
	P7	2	6 1/8" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PP1	3	3"x1/4" x 0'-2 3/8"	ST 412

NO.	DATE	REVISION	BY
1	2-5-69	AS NOTED	GBC

REF DRWG		
7-AB4-3	10-8-68	
7-AB4-15 & 16	7-22-68	
7-AB4-15.2	10-4-68	
SA-124	10 11-68	
7-AB3-39	10-4-68	
7-AB1-25	10-4-68	
7-AB2-8	7-22-68	

SERIES-WELD NUMBER-SIZE-SECTION
[illegible] x 5/16 x C4x5.4 [illegible]
2/19/69 - SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

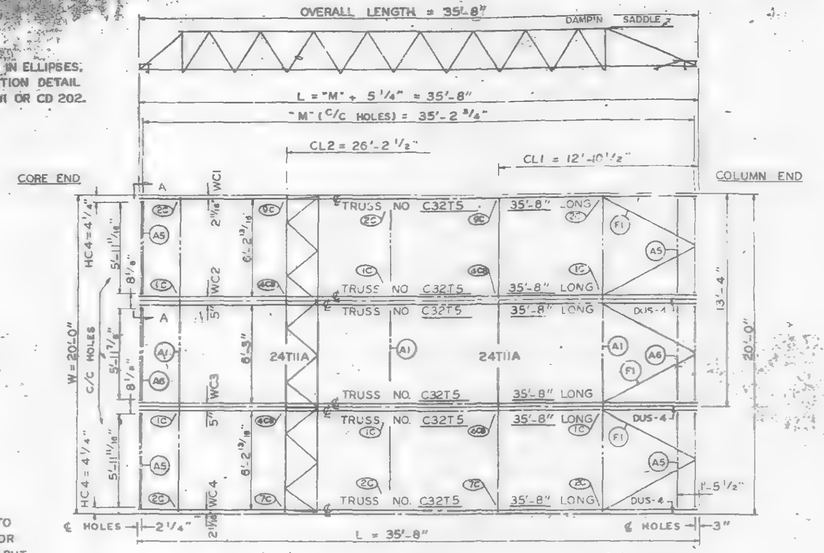
BLDG A FLOORS 25, 59, 92, (EAST & WEST)

PANEL HR2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-38	PLATE
APPROVED FOR FABRICATION BY _____ FOR PONYA	DATE	DRAWN BY R.A. DATE JAN 2 - 1969	
APPROVED FOR FABRICATION BY _____ FOR FABRICATOR	DATE	CHECKED BY T.M.CHUBA DATE JAN 3 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT NO WTC 221	SHEET NO. FP-HR2

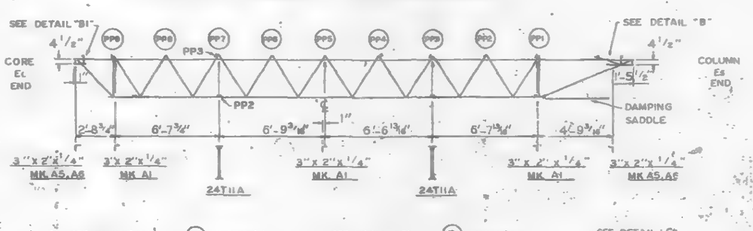
LACLEDE STEEL

LETTERS AND NUMBERS IN ELLIPSES, E.G. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

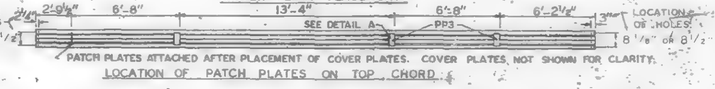


PANEL NO. HR6 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

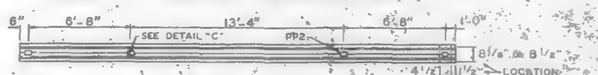


COVER PLATE PLACEMENT

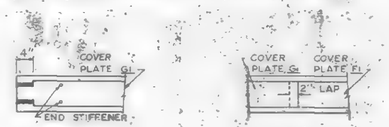


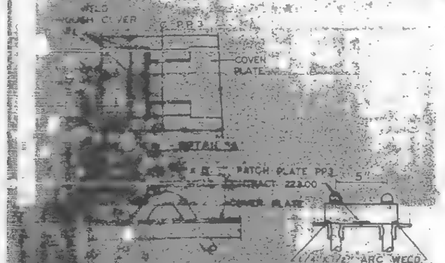
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES, NOT SHOWN FOR CLARITY.

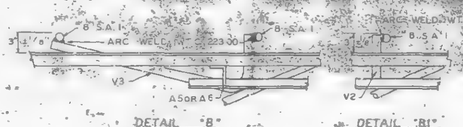
LOCATION OF PATCH PLATES ON TOP CHORD

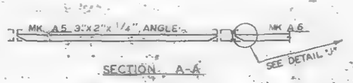


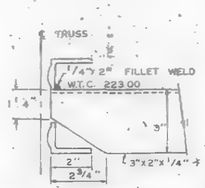
LOCATION OF PATCH PLATES ON BOTTOM CHORD

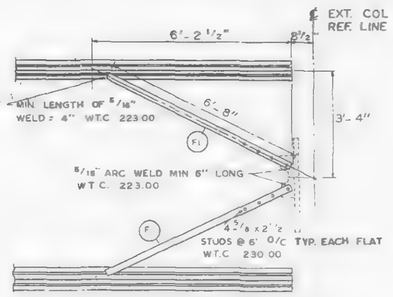




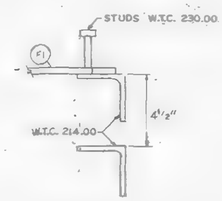








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T11A	2	24T11A - 19'-11"	BT211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST403
	A5	4	3" x 2" x 1/4" x 8'-1 7/16"	ST403
	A5	2	3" x 2" x 1/4" x 6'-2"	ST403
DIAGONAL FLATS	F	8	1" x 2" x 5 8 x 8'-8"	ST402
PATCH PLATES	PP3	12	2" x 1/4 x 0'-7"	ST 400
	PP2	12	3 x 3/8 x 0'-3"	ST 400
COVER PLATES	G1	3	7 x .0135 x 17'-10 1/2"	ST 303
	F1	3	7" x .0135" x 17'-3 1/8"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 1 1/2" x 1/4" x 8"	ST 400
3/4" ℄ SHEAR ANCHOR	SA	9	3/4" ℄ REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS4	3	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/4"	ST298
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .39" x 0'-8"	ST 400
	P7	2	6 1/2" x 1/2" x 1'-0"	ST 401

1'-0"
0'-8"

NO.	DATE	REVISION	BY

REF DRWG.

7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-6	7-22-68
7-AB4-42	10-15-68

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON Structural & Civil Engineers
APPROVED / APPROVED AS NOTED / RESUBMIT / REJECTED
Date 7/9/71 NYPA

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-74 (WEST) 84-91, 93-106 (EAST & WEST)
PANEL HR6 - 20'-0" x 35'-8"
BLDG. B FLOORS 50-58, 60-74 (SOUTH) 84-91, 93-94 (SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-18	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY PwB DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.	DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	
DETAILS OF [illegible] WEBB		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-HR6

LETTERS AND NUMBERS IN ELLIPSES, e.g. (AB), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

OVERALL LENGTH = 35'-8"

L = "M" = 5 1/4" = 35'-8"

"M" C/C HOLES = 35'-2 3/8"

CL2 = 26'-2 1/2"

CL1 = 12'-10 1/2"

CORE END

COLUMN END

TRUSS NO. C32T23R 35'-8" LONG

TRUSS NO. C32T23L 35'-8" LONG

TRUSS NO. C32T23R 35'-8" LONG

TRUSS NO. C32T23L 35'-8" LONG

TRUSS NO. C32T24R 35'-8" LONG

24T11A

24T11C

W = 20'-0"

H.C. 4 = 4'-1 5/8"

H.C. 5 = 5'-11 7/8"

H.C. 6 = 4'-1 5/8"

C/C HOLES

WC1 2'-9 3/8"

WC2 5'-11 7/8"

WC3 6'-3"

WC4 5'-11 7/8"

WC5 2'-9 3/8"

13'-4"

20'-0"

1'-5 1/2"

℄ HOLES 2'-1 1/4"

℄ HOLES 3"

L = 35'-8"

PANEL NO. H7 SIZE 20'-0" x 35'-8"

"H" & DIMENSION HC4 ARE RELATED TO ANGLES PUT IN BEARING END OF FLOOR PANELS WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE IN THE COLUMN CLOSE GAUGES.

SIZE DETAIL "B"

CORE EL. END

COLUMN EL. END

PP3

PP2

24'-8 3/4"

8'-7 3/16"

8'-8 3/16"

8'-8 3/16"

6'-8"

4'-8"

3" x 8" x 3/4" MK. A3, A8

3" x 8" x 1/4" MK. A1

3" x 6" x 1/4" MK. A1

24T11A

24T11C

3" x 8" x 1/4" MK. A1

3" x 8" x 1/4" MK. A33

SEE DETAIL "D" (G) 17'-10 1/8" SEE DETAIL "E" (H) 17'-8 3/4" SEE DETAIL "F"

COVER PLATE PLACEMENT

LOCATION OF HOLES 2'-0 3/8" 6'-8" 13'-4" 6'-8" 6'-2 5/8" LOCATION OF HOLES

SEE DETAIL A PP3

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

6" 6'-8" 13'-4" SEE DETAIL "C" PP2 8'-8" 8"

LOCATION OF PATCH PLATES ON BOTTOM CHORD

DETAIL "A"

PP3 WELD

COVER PLATE

PATCH PLATE PP3

1/4" FILLET ARC WELD CONTRACT 22300

COVER PLATE

SECTION D-D

1/4" FILLET ARC WELD WTC 229.00

DETAIL "C"

SECTION E-E

ALL WELDS TO BE MADE WITH 5018 HYDROGEN RODS IN THE FLAT POSITION OR EQUAL.

UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE FULL STRENGTH.

ARC WELD WTC 223.00

3" x 8" x 3/8" x 0'-8" PATCH PLATE MK. PP3

A 1/4" / B 1/4"

DETAIL "D"

COVER PLATE GL

END STIFFENER

DETAIL "E"

COVER PLATE GL

COVER PLATE GL

8" LAP

COVER PLATES 28 GA. THICK

FIELD FINISH COVER PLATE OVER END STIFFENER W.T.C. 220.00

DETAIL "F"

2'-0 1/2" TO 6"

NOTCH

COVER PLATE GL

EXT COL REF. LINE

6'-2 1/2"

6'-8"

1'-3 1/4"

GUSSET LENGTH OF 16" WELD = 4 WTC 223.00

5/16" ARC WELD MIN 6" LONG WTC 223.00

STUDS @ 6" WTC 230

TYP EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS, 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

℄ TRUSS

1/4" FILLET-FULL LENGTH = W.T.C. 223

1/4" FILLET-FULL LENGTH = W.T.C. 223

DETAIL "K"

END SUPPORT ANGLE ATTACHMENT

℄ TRUSS

2 3/4" FILLET W.T.C. 223

DETAIL "H"

END SUPPORT ANGLE ATTACHMENT

MK. A33 3" x 2" x 1/4" x

MK. A33

DETAIL "K"

SECTION C-C

END SUPPORT ANGLE

ARC WELD WTC 223.00

"S.S.A.I."

DETAIL "B"

MK. A8 3" x 2" x 1/4" ANGLE

MK. A8

SEE DETAIL "B"

SECTION A-A

END SUPPORT ANGLES

℄ TRUSS

1/4" x 8" FILLET WELD WTC 223.00

3" x 2" x 1/4"

2 3/4"

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS	SIZE	SHT. CATEG.
FLOOR TRUSSES	T23R	3	C32T23R - 35'-8"	ST 403
	T23L	2	C32T23L - 35'-8"	ST 403
	T24R	1	C32T24R - 35'-8"	ST 403
BRIDGING TRUSSES	T11C	1	24 T11C - 18'-11"	ST 214C
	T11A	1	24T11A - 18'-11"	ST 214A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST 403
	A5	2	3" x 2" x 1/4" x 6'-7"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-2"	ST 403
	A33	3	3" x 2" x 1/4" x 5'-10"	ST 610
PATCH PLATES	PP3	12	3" x 1/4" x 2'-7"	ST 400
	PP2	12	3" x 5/16" x 6'-3"	ST 400
COVER PLATES	G1	3	17" x 0.0375" x 10'-10 1/2"	ST 395
	H1	3	8" x 0.0375" x 17'-3 3/4"	ST 395
ANGLE CLIPS	C2	12	2" x 1" x 1/4" x 1'-0"	ST 400
SHEAR ANCHOR	SA1	9	3/4" DIA. x 8" LONG	ST 400
HORIZONTAL FLATS	F1	9	1/4" x 3" x 6'-8"	ST 400
CONNECTION BAR	CB1	3	1" x 8" x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3/4" x 3" x 1'-0" x 8'-4"	ST 400
	P2	2	4" x 3" x 1'-0" x 8'-4"	ST 400
	P7	2	5 1/4" x 3" x 1'-0" x 8'-4"	ST 401
CLOSURE PLATE	P14	3	3" x 3" x 0'-2"	ST 400

NO.	DATE	REVISION	BY
3	3-17-69	AS NOTED	S.S.C.
2	2-4-69	AS NOTED	S.S.C.

REF DRWG.

7-AB4-8	10-25-68
7-AB4-15 & 16	7-29-68
7-AB4-15.2	10-24-68
SA 124	10-11-68
7-AB3-38	10-4-68
7-AB 22	10-4-68
7-AB2-6	7-29-68

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N Y C

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)

PANEL H7 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DIVISION DRAWING NO. 1 - 403-38 PLATE

APPROVED FOR FABRICATION BY FOR PONYA — DATE 3/14/69

DRAWN BY S.S.A.

DATE JAN. 8 1969

CHECKED BY T.N. OHARA

DATE JAN. 8 1969

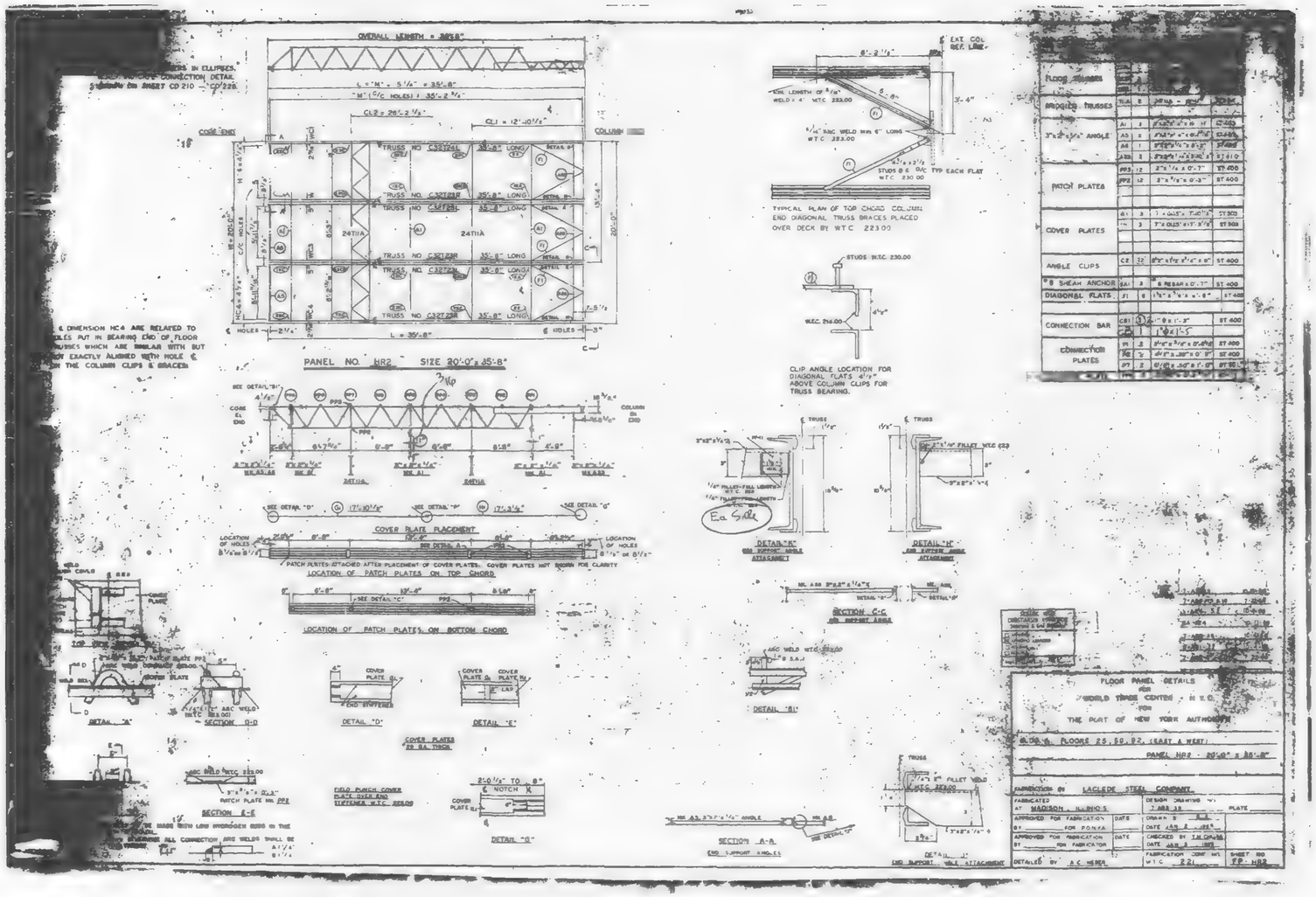
APPROVED FOR FABRICATION BY — DATE

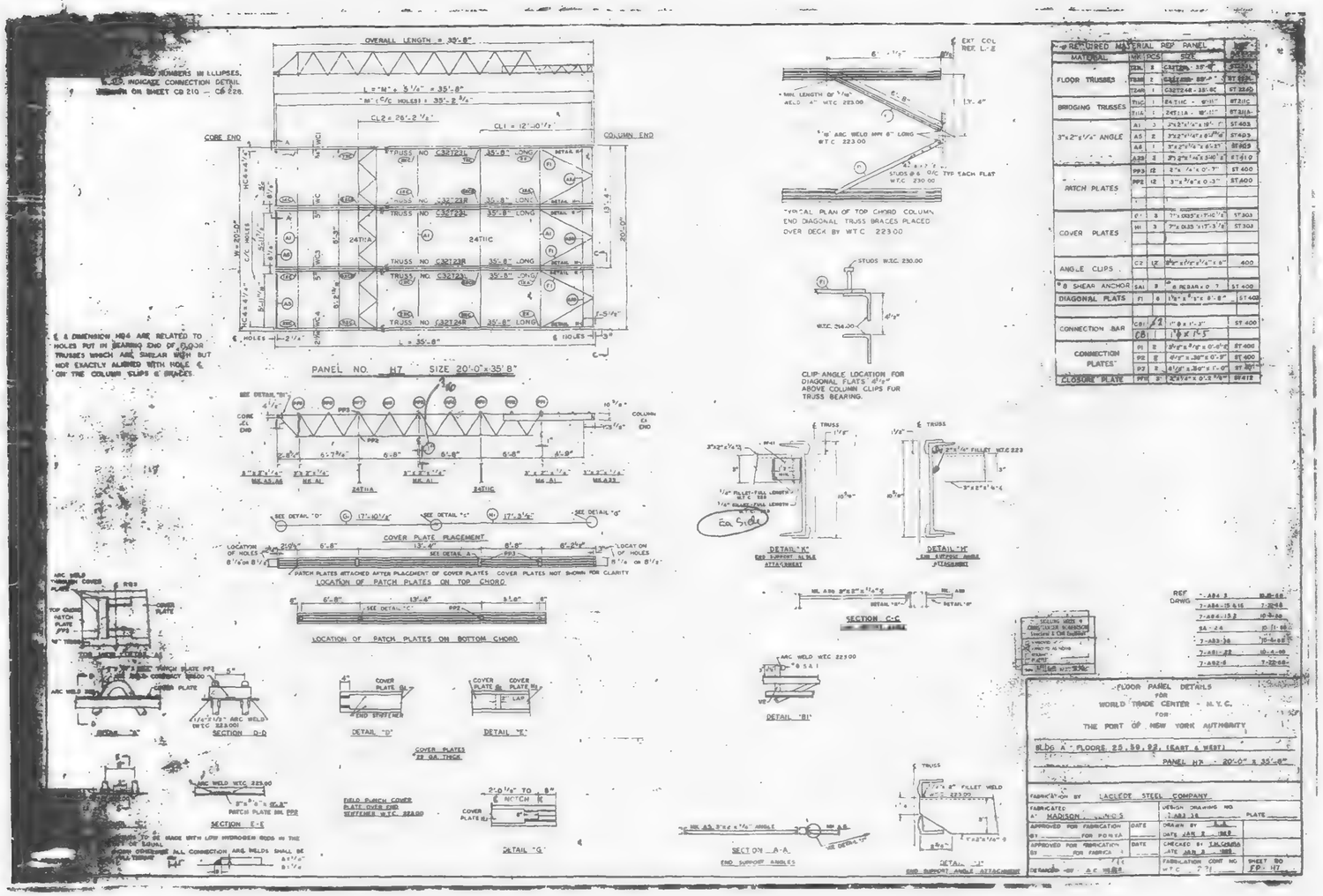
FOR FABRICATION

DETAILED BY

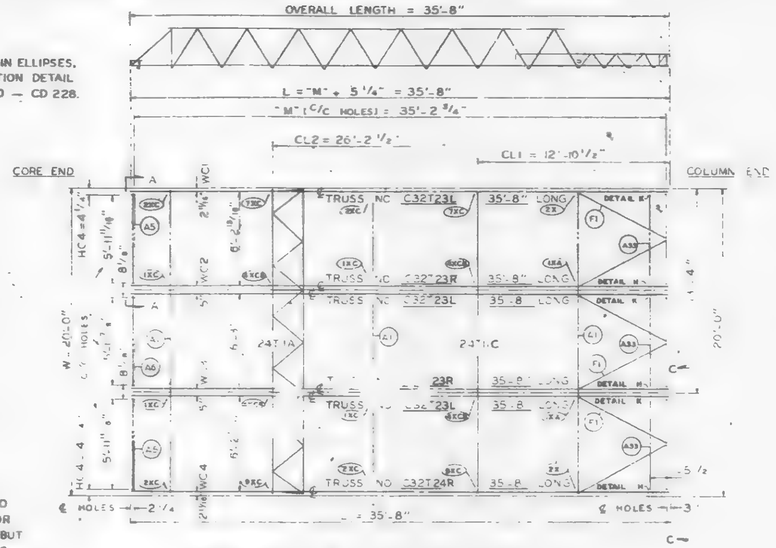
FABRICATION CONT. NO. W.T.C. 2.21

SHEET NO. FP - H7


OVERALL LENGTH = 35'-8"
L = "M" + 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 28'-2 1/8"
CL1 = 12'-10 1/8"
COVER END
COLUMN
TRUSS NO. C327241
TRUSS NO. C327231
TRUSS NO. C327221
TRUSS NO. C327211
TRUSS NO. C327201
35'-8" LONG
24TIIA
L = 35'-8"
HOLES
PANEL NO. HR2 SIZE 20'-0" x 35'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY
DETAIL "A"
SECTION G-G
DETAIL "D"
DETAIL "E"
COVER PLATES 20 GA. THICK
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 22500
DETAIL "G"
SECTION E-E
SECTION A-A
END SUPPORT ANGLES
DETAIL "J"
END SUPPORT WALL ATTACHMENT
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT
DETAIL "H"
END EXTERIOR ANGLE ATTACHMENT
SECTION C-C
END SUPPORT ANGLE
DETAIL "B1"
EXT. COL. REF. LINE
EXT. LENGTH OF 5"x3½" WELD = 4" W.T.C. 22300
STUDS @ 6" O/C W.T.C. 23000
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 22300
STUDS W.T.C. 23000
W.T.C. 24400
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY
FLOORS 25, 59, 92, (EAST & WEST)
PANEL HR2 - 20'-0" x 35'-8"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR PONYA
APPROVED FOR FABRICATION BY FOR FABRICATOR
DETAILED BY A.C. HEBER
DESIGN DRAWING NO. 7 ABB 38
DRAWN B.E.
DATE 4-59 & 1-60
CHECKED BY T.M. CRAIG
DATE 4-61 & 1-62
FABRICATION JOINT NO. W.T.C. 221
SHEET NO. FP - HR2

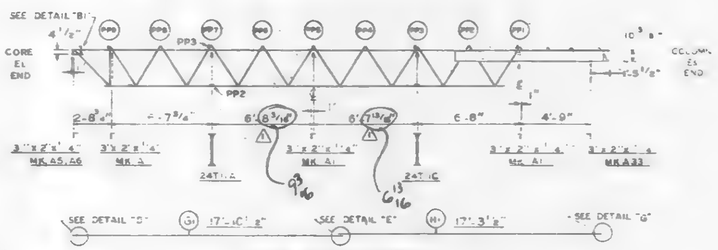

OVERALL LENGTH = 35'-8"
L = "M" @ 5 1/4" = 35'-8"
"M" (C/C HOLES) = 35'-2 3/4"
CL2 = 26'-2 1/2"
CL1 = 12'-10 1/2"
CORE END
COLUMN END
TRUSS NO. C327231 35'-8" LONG
TRUSS NO. C327230 35'-8" LONG
TRUSS NO. C327229 35'-8" LONG
TRUSS NO. C327228 35'-8" LONG
24TIIA
24TIIC
W = 20'-0"
L = 35'-8"
6 HOLES
PANEL NO. H7 SIZE 20'-0" x 35'-8"
SEE DETAIL "B"
PP3
PP2
CORE EL END
COLUMN CL END
24TIIA
24TIIC
SEE DETAIL "D"
SEE DETAIL "C"
SEE DETAIL "G"
COVER PLATE PLACEMENT
LOCATION OF HOLES
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY
LOCATION OF PATCH PLATES ON TOP CHORD
SEE DETAIL "C"
LOCATION OF PATCH PLATES ON BOTTOM CHORD
ARC WELD TYPICAL COVER PLATE
TOP CHORD PATCH PLATE PP3
COVER PLATE
SEE DETAIL "A"
3"x3"x5/16" ANGLE CONNECT. WELD
5"
1/4"x5 1/2" ARC WELD WTC 22300
SECTION D-D
4"
COVER PLATE B1
END STIFFENER
DETAIL "D"
COVER PLATE B1
COVER PLATE B2
2" LAP
DETAIL "E"
COVER PLATES 28 GA. THICK.
FIELD PUNCH COVER PLATE OVER END STIFFENER WTC 22300
2'-0 1/2" TO 8" NOTCH
COVER PLATE B2
DETAIL "G"
ARC WELD WTC 223.00
3"x8"x 1/2" PATCH PLATE MK PP2
SECTION E-E
WELDING TO BE MADE WITH LOW HYDROGEN ROD OR THE EQUAL
ALL CONNECTION ARC WELDS SHALL BE 5/16"
EXT COL PER L-E
6'-8"
13'-4"
MIN. LENGTH OF 5/16" WELD 4" WTC 223.00
5/16" ARC WELD MIN 6" LONG WTC 223.00
STUDS @ 6" O/C TYP EACH FLAT WTC 230.00
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00
STUDS W.T.C. 230.00
WTC 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS @ 16" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
REQUIRED MATERIAL PER PANEL
MATERIAL | MK | PCS | SIZE | ASTM
FLOOR TRUSSES | TIIA | 2 | C327231 - 35'-8" | ST 3201
TIIB | 2 | C327230 - 35'-8" | ST 3201
TIIC | 1 | C327228 - 35'-8" | ST 3240
BRIDGING TRUSSES | TIIC | 1 | EA TIIC - 9'-11" | ST 211C
TIIA | 1 | 24TIIA - 10'-11" | ST 211A
3"x2"x5/16" ANGLE | A1 | 3 | 2"x3"x1/4"x 19" - 1" | ST 403
A5 | 2 | 3"x2"x1/4"x 6'-8 1/2" | ST 403
A8 | 1 | 3"x2"x1/4"x 6'-3" | ST 403
A23 | 3 | 3"x2"x1/4"x 3'-10" | ST 410
PATCH PLATES | PP3 | 12 | 2"x 1/4"x 0'-7" | ST 400
PP2 | 12 | 3"x 5/16"x 0'-3" | ST 400
COVER PLATES | B1 | 3 | 7"x 0.03"x 17'-10 1/2" | ST 303
W1 | 3 | 7"x 0.03 "x 17'-3 1/2" | ST 303
ANGLE CLIPS | C2 | 12 | 3"x 3"x 1/4"x 1/4"x 8" | 400
"B" SHEAR ANCHOR | SA1 | 3 | 3/4 REBAR x 0'-7" | ST 400
DIAGONAL PLATE | F1 | 8 | 1'-8"x 5"x 5/16"x 8'-8" | ST 400
CONNECTION BAR | CB1 | 2 | 1" Ø x 1'-2" | ST 400
CB | | 1" Ø x 1'-5" |
CONNECTION PLATES | P1 | 2 | 2'-0"x 8"x 5/16" x 0'-0"x 6" | ST 400
P2 | 2 | 0'-11"x 3/8"x 0'-3" | ST 400
P3 | 2 | 8 1/16"x 3/8"x 1'-0" | ST 400
CLOSURE PLATE | PP4 | 2 | 2"x 3"x 4"x 0'-2 5/16" | ST 412
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "H" END SUPPORT ANGLE ATTACHMENT
SECTION C-C
DETAIL "B1"
SECTION A-A
END SUPPORT ANGLES
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
REF DRWG
7-A84-3 10-18-68
7-A84-15 & 16 7-30-68
7-A84-13-2 10-2-68
SA-2A 10-11-68
7-A83-36 '11-6-68
7-A81-22 10-4-68
7-A82-8 7-22-68
FLOOR PANEL DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY
BLDG A - FLOORS 25, 59, 92, (EAST & WEST)
PANEL H7 - 20'-0" x 35'-8"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY ____ FOR PONYA
APPROVED FOR FABRICATION BY ____ FOR FABRICA
DETAILED BY A.C. WEBB
DESIGN DRAWING NO 7-A83-36 PLATE
DRAWN BY ____ DATE JAN 2 1969
CHECKED BY J.M.COMBS DATE JAN 2 1969
FABRICATION CONT NO. W.T.C. 731
SHEET NO FP-H7

LETTERS AND NUMBERS IN ELLIPSES, ie (2XC), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.

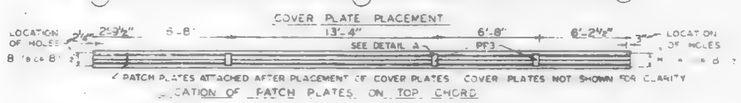


PANEL NO H7 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

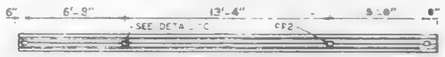


COVER PLATE PLACEMENT

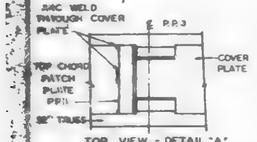


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY

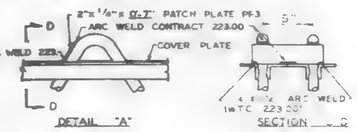
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"



DETAIL "A" SECTION

DETAIL "D" DETAIL "E"

COVER PLATES 29 GA THICK

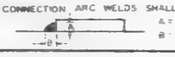
DETAIL "C"

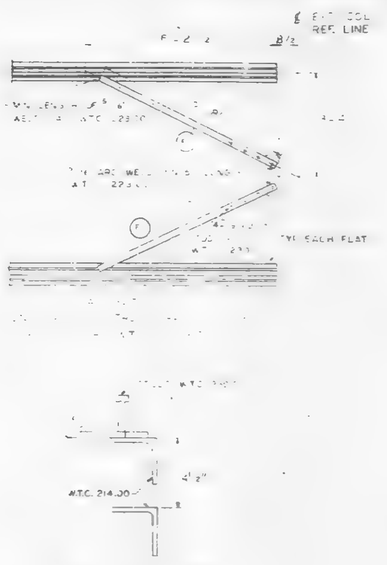
SECTION E-E

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

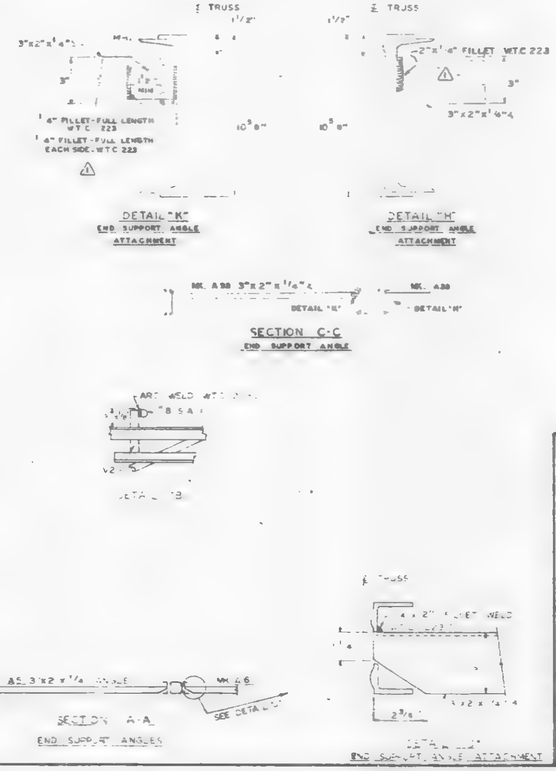
DETAIL "G"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.





REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	2	C32T23R - 35'-8"	ST 223R
	T24R	1	C32T24R - 35'-8"	ST 224R
BRIDGING TRUSSES	T11C	1	24T11C - 19'-11"	ST 211C
	T11A	1	24T11A - 19'-11"	ST 211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1'-6"x 19'-11"	ST 403
	A5	2	3"x2"x1'-6"x 6'-2 15/16"	ST 403
	A6	1	3"x2"x1'-6"x 6'-2"	ST 403
	A33	3	3"x2"x1'-6"x 5'-10 3/4"	ST 410
PATCH PLATES	PP3	12	2"x 1/4 x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	3	7"x 0.135"x 17-10 1/2"	ST 303
	H1	3	7"x 0.135"x 17-3 1/2"	ST 303
ANGLE CLIPS		12	2 1/2" x 1 1/2 x 1/4" x 6"	ST 400
1" ℄ SHEAR ANCHOR	SA1	3	1" ℄ REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
CONNECTION BAR	CB1	3	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	2	3'/8" x 3'-6" x 0'-6 1/2"	ST 400
	P2	2	4'/8" x .39" x 0'-9"	ST 400
	P7	2	6 1/8" x .50" x 1'-0"	ST 401
CLOSURE PLATE	PFN	3	3"x 1'-4" x 0'-2 3/8"	ST 412

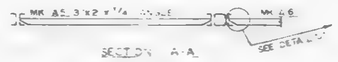


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE

DETAIL "B"



SECTION A-A END SUPPORT ANGLES

END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION
1	2-4-69	AS NOTED

REF DRWG		
7-AB4-3	10-8-68	
7-AB4-15 & 16	7-22-68	
7-AB4-15.2	10-4-68	
SA-124	10 11-68	
7-AB3-38	10-4-68	
7-AB1-22	10-4-68	
7-AB2-6	7-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)

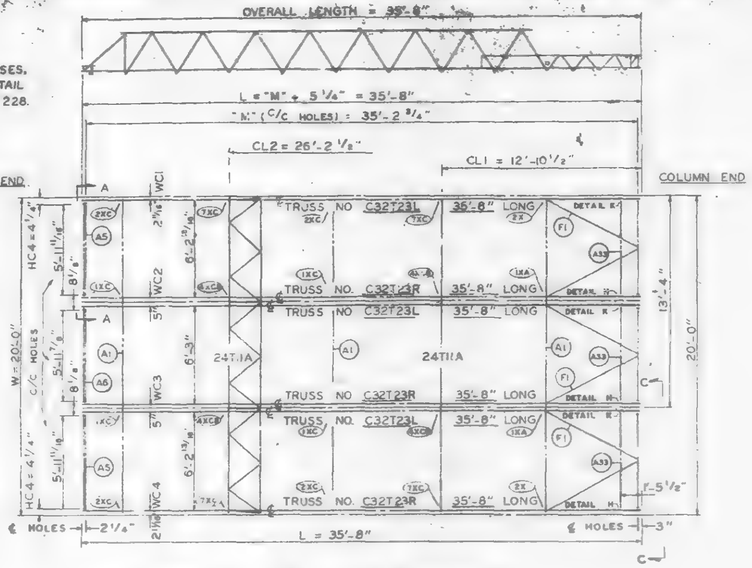
PANEL H7 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

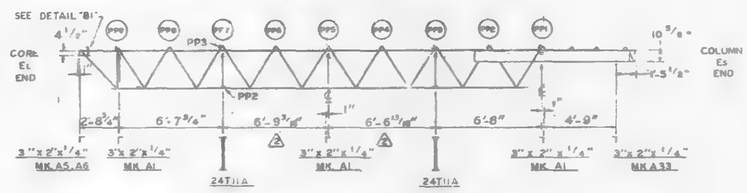
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-38	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY R.B. DATE JAN 8, 1969	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY J.M CHURA DATE JAN 3, 1969	
LACLEDE STEEL CO. DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO. FP - H7

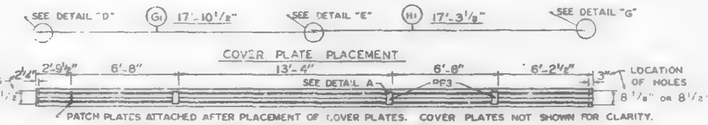
NUMBERS AND LETTERS IN ELLIPSES, E.G. (A5), INDICATE CONNECTION DETAIL MARK FROM SHEET CD 210 — CD 228.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY. ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



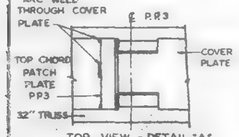
PANEL NO. J2 SIZE 20'-0" x 35'-8"



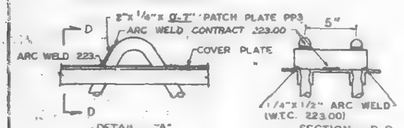


LOCATION OF PATCH PLATES ON TOP CHORD

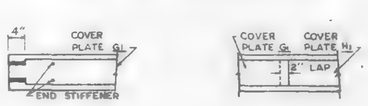
LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



DETAIL "D" DETAIL "E"

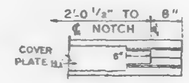
COVER PLATES 29 GA. THICK

DETAIL "C"

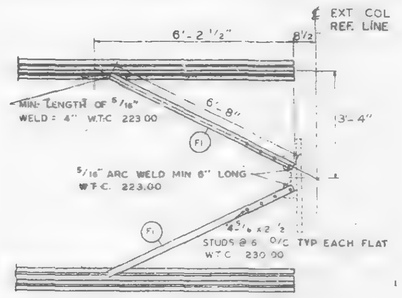
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

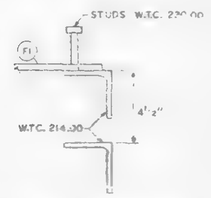
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



DETAIL "G"

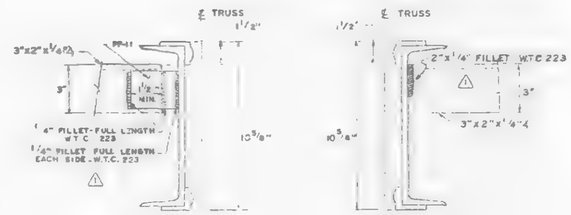


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

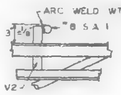
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST 223L
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3" x 2" x 1/4" ANGLE	A1	3	3"x2"x 4'-1"x 19'-11"	ST 403
	A5	2	3"x2"x1'-4"x 8'-1 3/16"	ST 403
	A6	1	3"x2"x1/4"x 8'-2"	ST 403
	A33	3	3"x2"x 1'-6"x 5'-10 1/2"	ST 410
PATCH PLATES	PP3	18	2"x 1'-4"x 0'-7"	ST 400
	PP2	16	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G	4	7"x 0.135"x 17-10 1/2"	ST 400
	H	4	7"x 0.135"x 17-3 1/2"	ST 400
ANGLE CLIPS	C2	2	2"x1/2"x 1'-1"x 6"	ST 400
3/8" SHEAR CONNECTOR	SA	4	3/8" ø HEADED STUD	ST 400
DIAGONAL FLATS	F1	6	1/2" x 5" x 6'-8"	ST 402
CONNECTION BAR	CB1	6	1/2" x 6" x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 7/8" x 0'-6 1/2"	ST 400
	P2	4	4 3/8" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
CLOSURE PLATE	PF11	3	3"x1'-4"x 0'-2 3/8"	ST 412



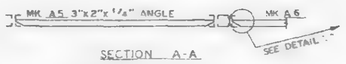
DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

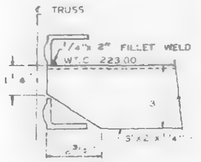
SECTION C-C END SUPPORT ANGLE



DETAIL "B1"



SECTION A-A END SUPPORT ANGLES



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
3	7-7-69	AS NOTED	GDC
2	3-11-69	AS NOTED	GDC
1	2-4-69	AS NOTED	GDC

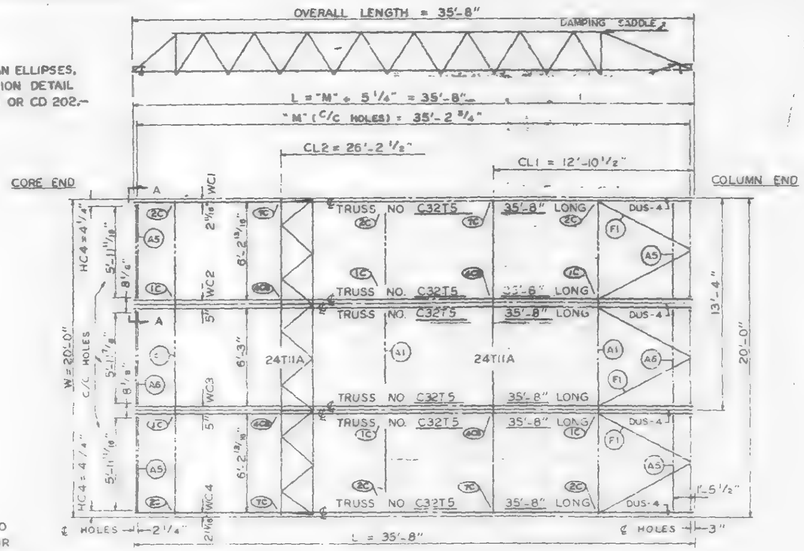
REF DRWG	
7-A84-3	10-6-68
7-A84-5 & 6	7-22-68
7-A84-15 C	10-4-68
SA-24	10-8-69
7-A83-43	10-4-68
7-A83-62	10-4-68
7-A82-6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 25, 59, 92, (EAST & WEST)
PANEL J2 2'-0" x 35'-8"
BLDG. B FLOORS 25, 59 & 92 (NORTH & SOUTH) (2)

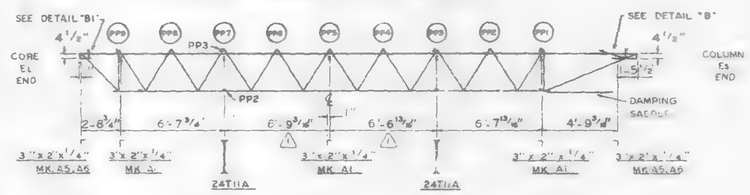
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-[illegible]	PLATE
APPROVED FOR FABRICATION BY James White P.E.	DATE 12/8/70	DRAWN BY R.B. DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M.CHUNA DATE JAN 2, 1969	
DETAILED BY A.C. NIELSEN		FABRICATION CONT NO. W.T.C 221	SHEET NO FP-J2

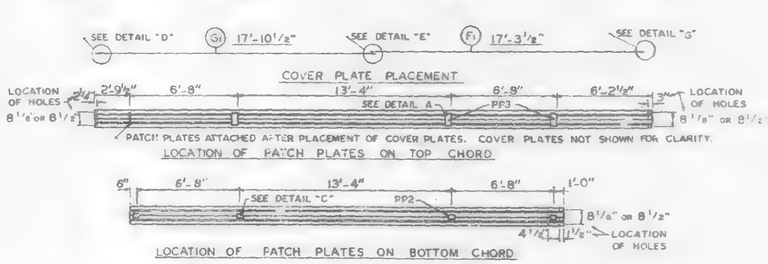
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

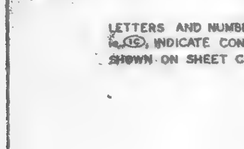


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

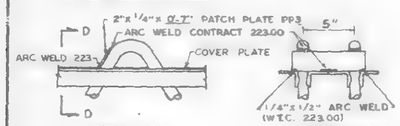
PANEL NO. J1 SIZE 20'-0" x 35'-8"



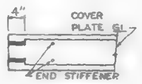




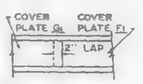
TOP VIEW - DETAIL "A"



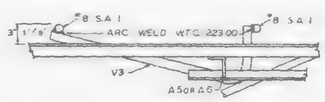
DETAIL "A" SECTION D-D



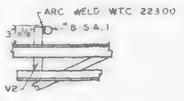
DETAIL "D"



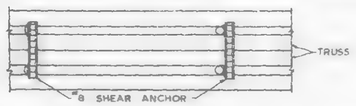
DETAIL "E"



DETAIL "B"



DETAIL "B1"



TOP VIEW - DETAIL "B"

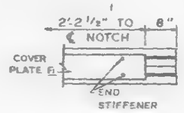
DETAIL "C"

SECTION E-E

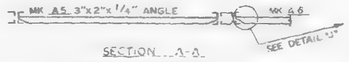
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

COVER PLATES 29 GA. THICK

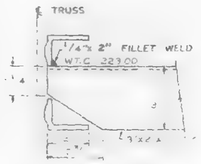
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



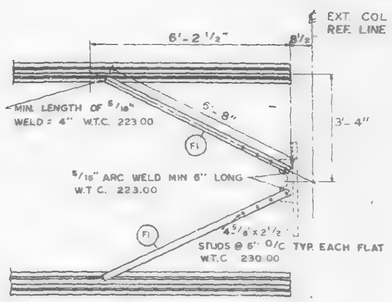
DETAIL "G"



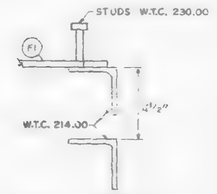
SECTION J-J
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST205
			-	
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1'-4"x 19'-11"	ST403
	A5	4	3"x2"x1'-4"x 6'-1 13/16"	ST403
	A6	2	3"x2"x1'-4"x 6'-2 1/2"	ST403
DIAGONAL FLATS	F	6	1" x 5"x 6'-8"	ST402
PATCH PLATES	PP3	18	2"x1'-4"x 0'-7"	ST 400
	PP2	18	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	4	7"x 0.135 x 7'-0 1/8"	ST 303
	F1	4	7"x 0.135 x 7'-3 1/2"	ST 303
ANGLE CLIPS	C2	6	2 1/2 x 1 1/2 x 1'-x 5/8"	ST 400
3/4" ø SHEAR ANCHOR	SA1	6	3" HEADED x 1'-7"	ST 400
DAMPING SADDLE	DUS-4	6	3" x 4 3" x 4" x 6" ø	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	F1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4'-2" x .38" x 0'-9"	ST 400
	P3	4	4'-2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-21-69	AS NOTED	GDS
1	2-21-69	AS NOTED	SDS

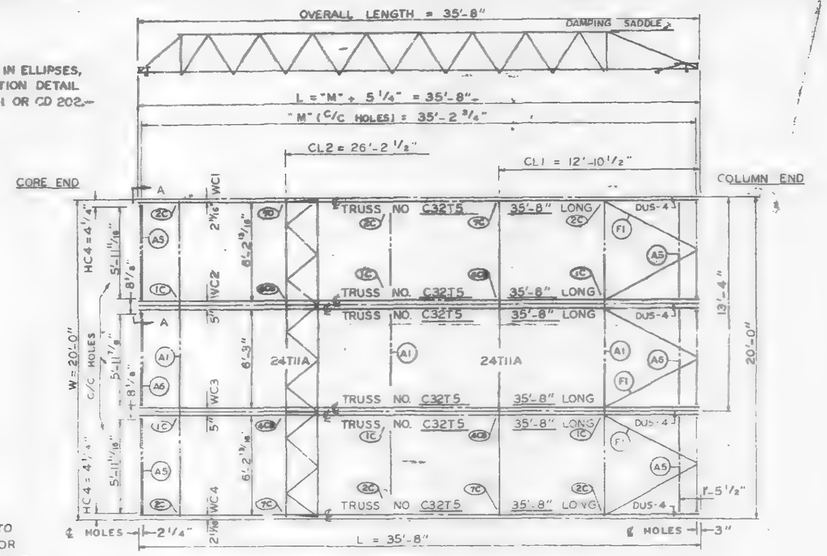
2 REF DRWG 7-A84-3,1 - 3-69
7-A84-5 & 16 7-22-68
7-A84-39-41 7-22-68
7-A84-24 - 7-68
7-A83 - 3-69
7-A84-1 & 2 7-22-68
7-A84-6 7-22-68
A84-42 & 43 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A - FLOORS 10-24, 26-40, 50-58, 60-66, 68-7 , 84-91 & 93-106 (EAST & WEST) PANEL J1 - 2" x 35'-8"
BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-91 93-106 (NORTH & SOUTH)

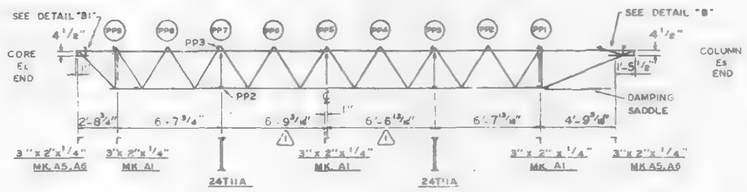
FABRICATION BY LEHIGH STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-A83-19 PLATE
APPROVED BY [illegible] DATE 6/12/70
APPROVED FOR FABRICATION BY [illegible] DATE
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY T.M.CHURA DATE APRIL 10, 1968
DETAILED BY A.C. WEBER
FABRICATION CONT NO FC 221
SHEET NO FP-J1

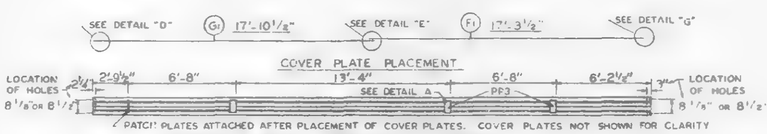
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



PANEL NO. J1 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

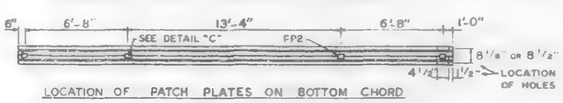




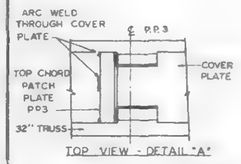
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

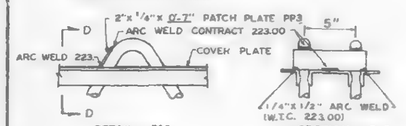
LOCATION OF PATCH PLATES ON TOP CHORD



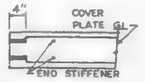
LOCATION OF PATCH PLATES ON BOTTOM CHORD



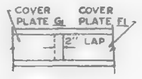
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

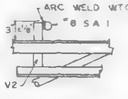


DETAIL "D"



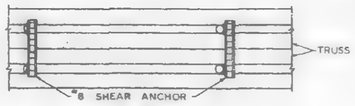
DETAIL "E"

DETAIL "B"



DETAIL "B1"

COVER PLATES 28 GA. THICK



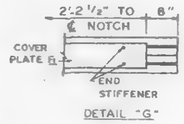
TOP VIEW - DETAIL "B"

DETAIL "C"

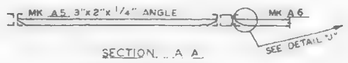
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WIT' LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

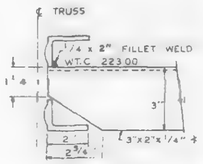
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



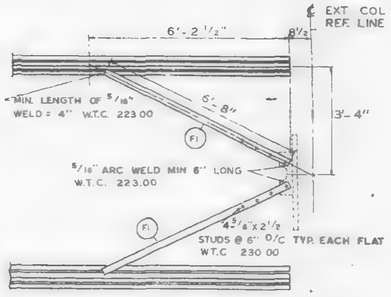
DETAIL "G"



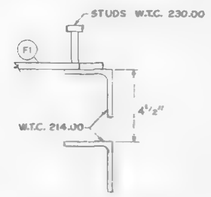
SECTION A A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T5	6	C32T5 - 35'-8"	ST 203
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST 211A
3" x 2" x 1/4" ANGLE	A1	3	3" x 2" x 1/4" x 19'-11"	ST 403
	A5	4	3" x 2" x 1/4" x 6'-1 13/16"	ST 403
	A6	2	3" x 2" x 1/4" x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	4 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP3	18	2" x 1/4" x 0'-7"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	G1	4	7" x 0.135" x 17'-10 1/2"	ST 303
	F1	4	7" x 0.135" x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2 x 1 1/2 x 1/4" x 6"	ST 400
"8 SHEAR ANCHOR	SA1	12	"8 REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	4	2 1/2" x 3 1/2" x 3/8" x 3'-6"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	6	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	8-23-68	AS NOTED	G.B.C.
1	2-21-68	AS NOTED	G.D.C.

2 REF DRWG

7-AB4-31	1-3-68
7-AB4-15 & 16	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-8-68
7-AB3-2	1-3-68
7-AB1-11 & 12	1-3-68
7-AB2-8	7-22-68
7-AB4-42 & 5	10-18-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL J1 - 20'-0" x 35'-8"

2 BLDG. B FLOORS 14-24, 26-40, 50-58, 60-74, 84-93 (SOUTH)

FABRICATION BY LACLEDE STEEL COMPANY

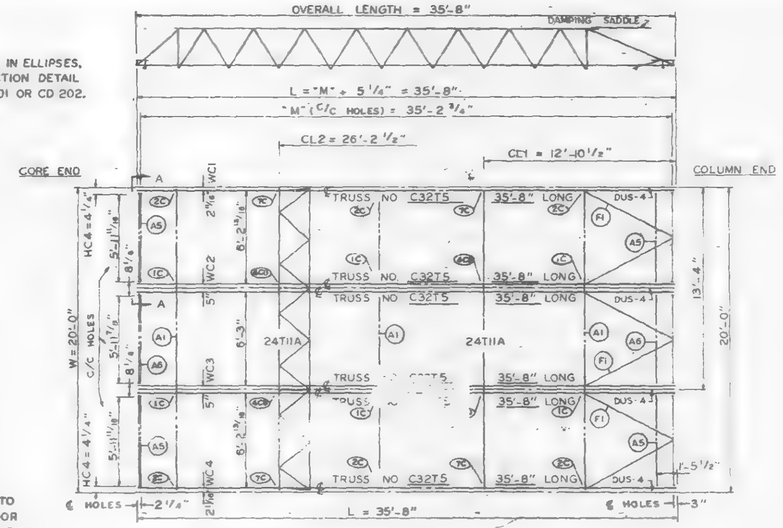
FABRICATED AT MADISON, ILLINOIS — DESIGN DRAWING NO 7-AB3-18 PLATE

APPROVED FOR FABRICATION BY ____ FOR P.A. OF N.Y. & N.J. — DATE 4/3/68 — DRAWN BY S.B. — DATE APRIL 10, 1968

APPROVED FOR FABRICATION BY THE STEEL ERECTOR — DATE — CHECKED BY T.M. CHUBA — DATE APRIL 10, 1968

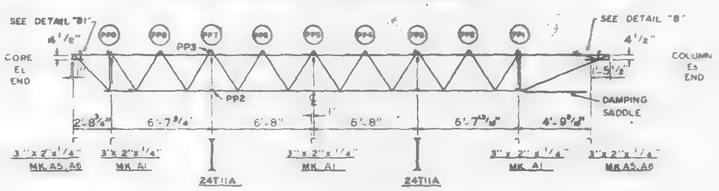
LACLEDE STEEL CO. — DETAILED BY A.C. WEBER — FABRICATION CONT. NO. W.T.C. 221 — SHOP NO.

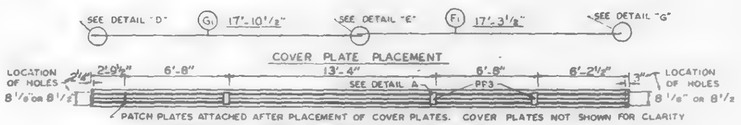
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

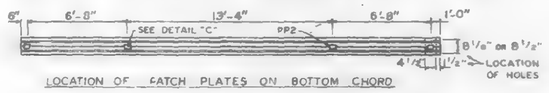


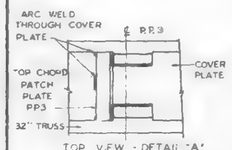
PANEL NO. J1 SIZE 20'-0" x 35'-8"

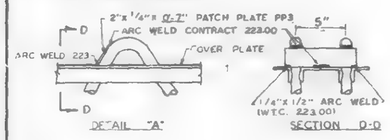
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

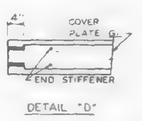


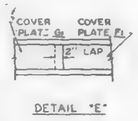


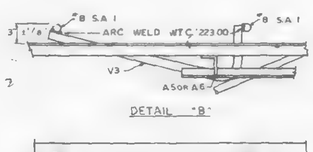




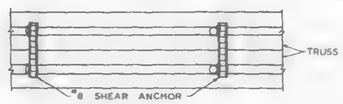


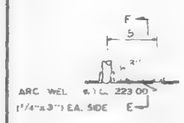




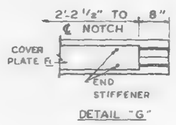


COVER PLATES
29 GA. THICK

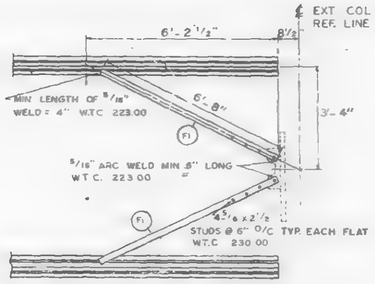




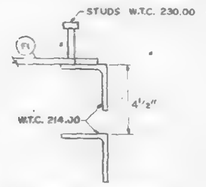
FIELD PUNCH COVER PLATE OVER END STIFFENER WTC 22300



NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET

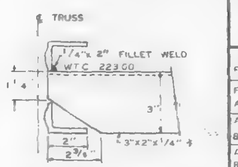


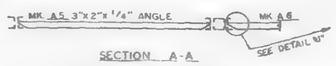
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	6	C32T5 - 35' 8"	ST205
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST 403
	A6	2	3"x2"x1/4"x 6'-1 13/16"	ST 403
DIAGONAL FLATS	F1	6	1' 2 1/2"x 5 8"x 6'-8	ST 402
PATCH PLATES	PP3	18	2'x 1/4"x 0'-7"	ST 400
	PP2	18	3' x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	4	7"x 0.135"x 17'-10 1/2"	ST 303
	F1	4	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2" x 3 1/2" x 1/4" x 8"	ST 400
3/4" ℄ SHEAR ANCHOR	SA1	12	3/4" ℄ REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS-4	4	1'-2 x 3'-2 x 3/8 x 1'-0 7/8	ST 298
COLLECTION BAR	CB1	4	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	F1	6	3'-2" x 3'-8" x 0'-0 1/2"	ST 400
	P2	4	4" 2" x .39" x 0'-3"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400





REF DWG		
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[illegible]	[illegible]	5 6 68
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[illegible]	[illegible]	3 68
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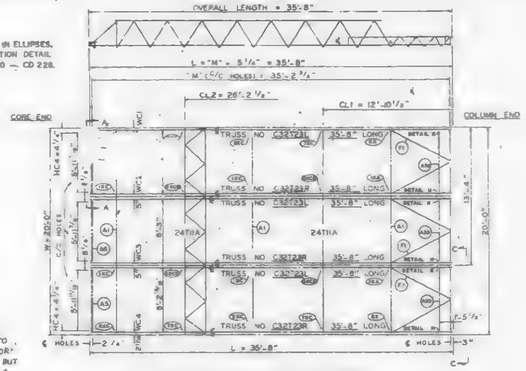
[illegible]	[illegible]	4 68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-40, 50-58, 60-66, 68-74, 84-91 & 93-106 (EAST & WEST) PANEL J1 - 20'-0" x 35'-8"

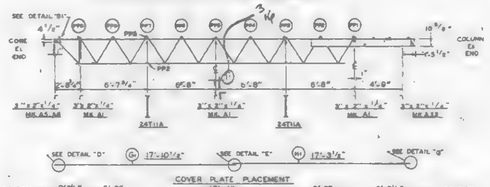
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-19 5-10-68	PLATE
APPROVED FOR FABRICATION: BY ____ FOR PONYA	DATE 5/16/68	DRAWN BY [illegible] DATE APRIL 10, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHUKA DATE APRIL 10, 1968	
DETAILED BY A.C. WEBER		FABRICATION CONTRACT NO WTC 221	SHEET NO FP-J1

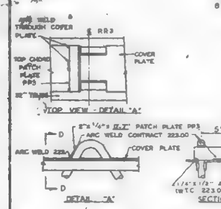
LETTERS AND NUMBERS IN ELLIPSES, SHOWN THUS (A1), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.



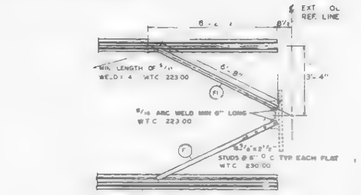
PANEL NO J2 SIZE 20'-0" x 35'-8"

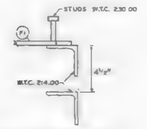
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

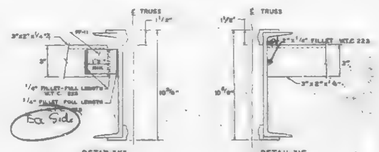




NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/2" FILLET.







REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
BRIDGING "RUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x19'-11"	ST403
	A5	2	3"x2"x1/4"x6'-2 3/4"	ST403
	A8	1	3"x2"x1/4"x8'-3"	ST403
	A30	3	3"x2"x1/4"x6'-2 3/4"	ST418
PATCH PLATES	PP2	28	2"x1 1/4"x 0'-7"	ST 400
	PP3	16	3"x 7/8"x 0'-3"	ST 400
COVER PLATES	C1	4	7"x 0.135"x 7'-10 1/4"	ST 903
	R1	-	7"x 0.135"x 17'-3 1/8"	ST 903
ANGLE CLIPS	L2	12	3 1/2"x 3 1/2"x 1/4"x 6"	ST 400
#8 SHEAR ANCHOR	SH	4	#8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1 1/2" x 8" @ 8'-8"	ST 402
CONNECTION BAR	C81	84	1" @ x 1'-3"	ST 400
	C8		1"@x1'-5"	
CONNECTION PLATES	P1	4	3/4"x 3/4"x 0'-8"	ST 400
	P2	4	3/4" x 3/8" x 0'-8"	ST 400
	P3	4	3/4" x 3/8" x 1'-0"	ST 400
CLOSURE PLATE	PP5	2	2"x1"x"x 0'-2 7/8"	ST 412

REF. DRWG		
7-AB4-3	12-12-88	
7-AB4-15 R16	7-20-88	
7-AB4-15.2	10-4-88	
EA-12.4	10-11-88	
7-AB3-40	10-6-88	
7-AB1-22	10-4-88	
7-AB2-8	7-22-88	

SEISMIC WELD CERTIFICATION ACCEPTANCE
Structural & Civil Engineer
DATE 6/15/89 BY SK

FLOOR PANEL DETAILS
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

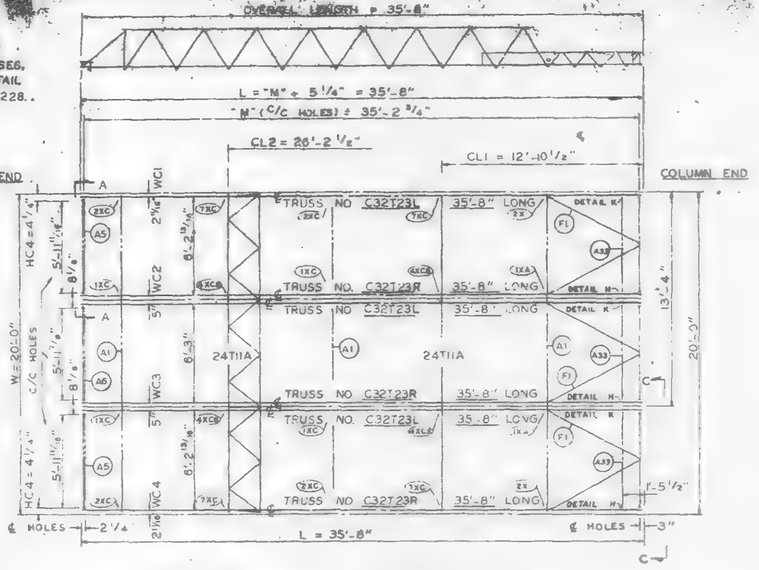
BLDG A FLOORS 23, 59, 92, (EAST & WEST)
PANEL J2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO J-AB2-15	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE	DRAWN BY [illegible] DATE JAN 2 1989	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE 1	CHECKED BY [illegible] DATE JAN 3 1989	
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-12

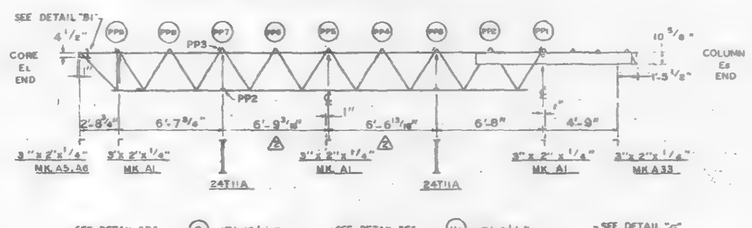
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET.

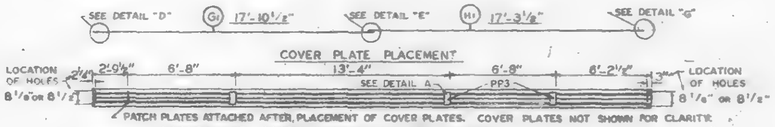
...HOLES IN ELLIPSES, ... CONNECTION DETAIL ... SHEET CS 210 — CD 228.

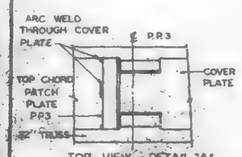


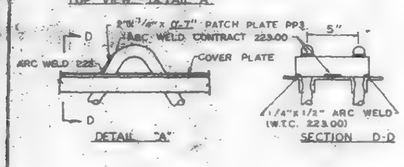
PANEL NO. J2 SIZE 20'-0" x 35'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

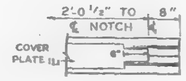




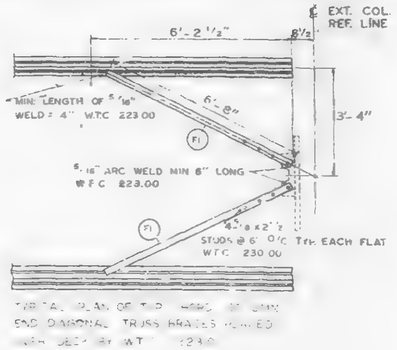


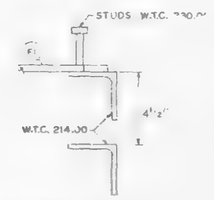


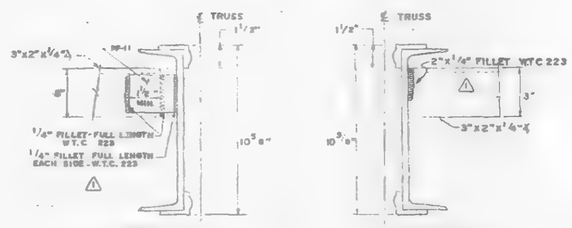
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

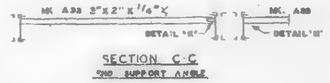


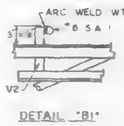
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

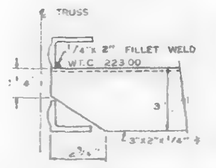












REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	
	T23R	3	C32T23R - 35'-8"	
BRIDGING TRUSSES	T11A	2	24T11A - 19'-11"	ST 402
3"x2"x1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST 403
	A5	2	3"x2"x1/4"x 6'-8 1/2"	ST 403
	A6	1	3"x2"x1/4"x 6'-2"	ST 403
	A33	3	3"x2"x1/4"x 5'-10"	ST 410
PATCH PLATES	PP3	16	2"x1/4"x 0'-7"	ST 400
	PP2	16	3"x3/8"x 0'-3"	ST 400
COVER PLATES	G1	4	7"x.0135"x17'-10 1/2"	ST 303
	H1	4	7"x.0135"x17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	6"x3"x1/2"x1/4"x 6"	ST 400
"B" SHEAR ANCHOR	SA1	4	"B" REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1/2" x 3/8" x 6'-8"	ST 402
CONNECTION BAR	CB1	8	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 5/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400
CLOSURE PLATE	PP11	3	3"x1/4" x 0'-2 3/8"	ST 412

NO.	DATE	REVISION	BY
3	7-7-69	AS NOTED	GDC
2	3-11-69	AS NOTED	GDC
1	2-4-69	AS NOTED	GDC

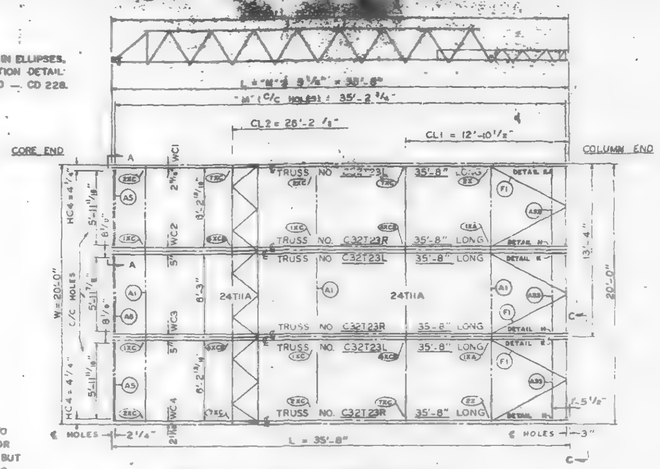
REF. DRWG.
7-AB4-8 10-5-68
7-AB4-15 & 16 7-22-68
7-AB4-15 2 10-4-68
7-AB4-4 10-6-69
7-AB3-42 10-4-68
7-AB1-22 10-4-68
7-A32-6 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)
PANEL J2 L 35'-8"
BLDG. B FLOORS 25, 59 & 92 (NORTH & SOUTH)

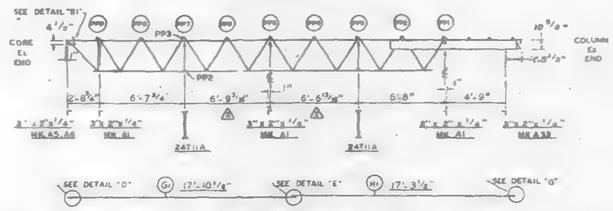
FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN. DRAWING NO.	7-AB3-[illegible] PLATE
APPROVED FOR FABRICATION BY	[illegible] FOR C.B.M.Y.A.	DATE 11/2/70	DRAWN BY [illegible] DATE JAN 8 1969
APPROVED FOR FABRICATION BY	FOR LACLEDE STEEL CO.	DATE	CHECKED BY T.N. CHUBA DATE JAN 1969
DETAILED BY	A.C. WEBER	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP 12

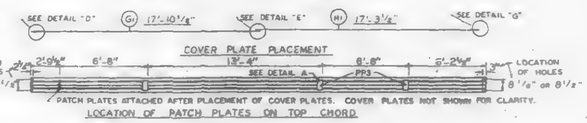
LETTERS AND NUMBERS IN ELLIPSES, (A5), (G1), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.



PANEL NO. J2 SIZE 20'-0" x 35'-8"

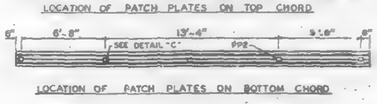
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



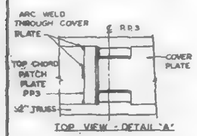


COVER PLATE PLACEMENT

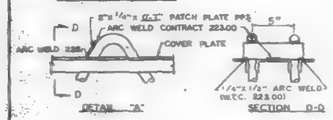
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



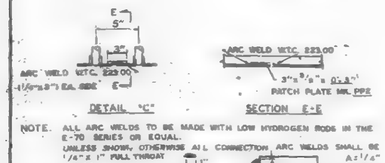
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "F"

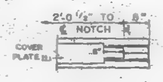
COVER PLATES 1/4" GA. THICK



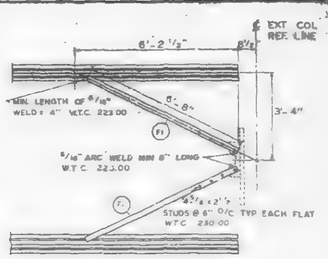
DETAIL "C" SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN, OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/16" x 1" FULL THROAT FILLET.

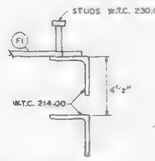
FIELD BUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



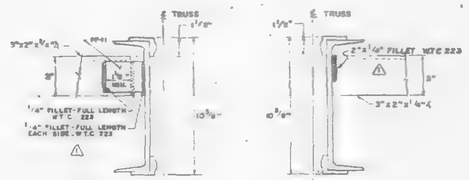
DETAIL "G"



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00

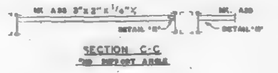


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-9" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



DETAIL "K" END SUPPORT ANGLE ATTACHMENT

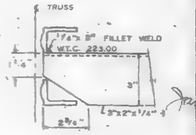
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE

DETAIL "B1"

SECTION A-A END SUPPORT ANGLES



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2JL	3	C32T23L - 35'-8"	ST2254
	T2JR	3	C32T23R - 35'-8"	ST 2255
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x 2"x 5/16" ANGLE	A1	3	3"x2"x 5/16" x 19'-11"	ST 403
	A5	2	3"x2"x 1/4" x 6'-11 5/16"	ST 403
	A6	1	3"x2"x 1/4" x 6'-2"	ST 403
	A32	2	3"x2"x 1/4" x 3'-10 1/2"	ST 410
PATCH PLATES	PP3	18	8"x 1/4" x 0'-7"	ST 400
	PP2	18	3 "x 5/8"x 0'-5"	ST 400
COVER PLATES	G1	4	7"x 0.035"x 17'-10 1/8"	ST 303
	H1	4	7"x 0.135"x 17'-3 1/4"	ST 303
ANGLE CLIPS	L2	12	6"x4"x 5/16"x 3/4" x 0'-7"	ST 400
8 SHEAR ANCHOR	SA1	4	8 REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	8	1/2" x 5/8"x 6'-8"	ST 402
CONNECTION BAR	CB1	8	1" 0 x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3/8" x 5/8" x 0'-6 1/2"	ST 400
	P2	4	3/8" x .38" x 0'-9"	ST 400
	P3	4	3/8" x .38" x 1'-0"	ST 400
CLOSURE PLATE	PP10	3	3"x 1/4"x 0'-2 3/8"	ST 412

NO.	DATE	REVISION	BY
3	3-11-69	AS NOTED	GDC
2	2-4-69	AS NOTED	GDC

REF. DRWG.

7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-13.2	10-4-68
SA-12.4	10-11-68
7-AB3-40	10-4-68
7-AB1-22	10-4-68
7-AB2-8	7-22-68

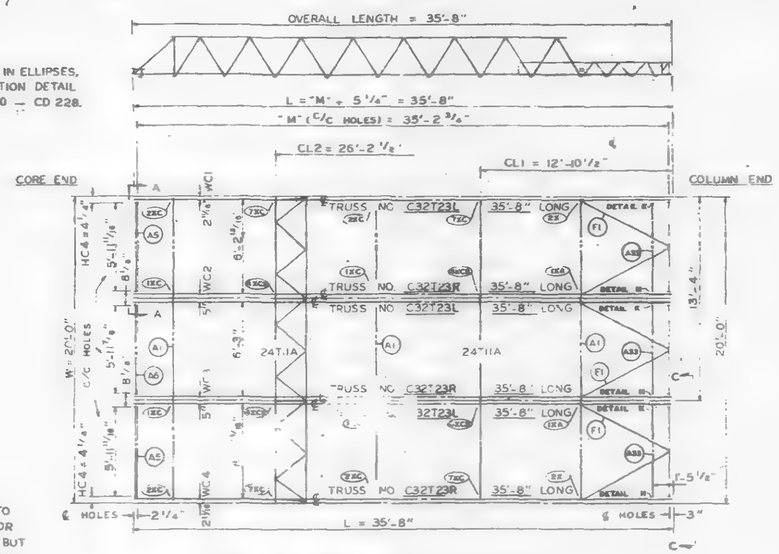
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 82, (EAST & WEST)
PANEL J2 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-[illegible] PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y. DATE 3/24/69
DRAWN BY [illegible] DATE JAN. 8, 1968
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATION DATE
CHECKED BY T.M. CHUBA DATE JAN. 3, 1968
DETAILED BY A.C. WEBER
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP# J2

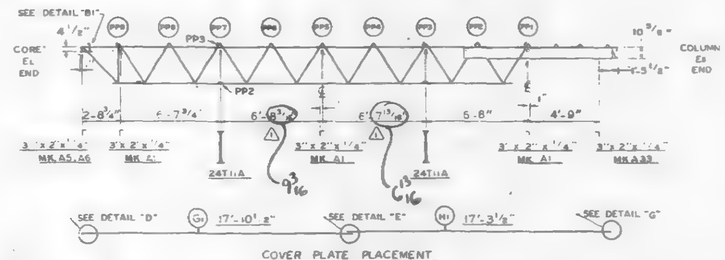
LACLEDE STEEL CO.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1XC), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 210 — CD 228.



PANEL NO. J2 SIZE 20'-0" x 35'-8"

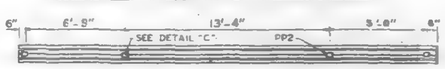
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



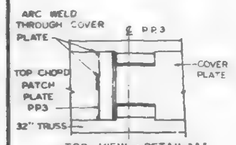
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

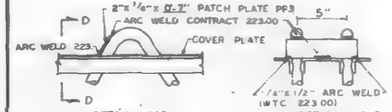
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



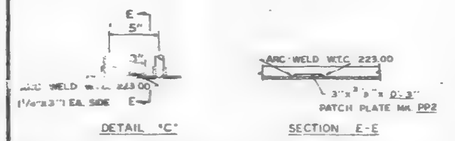
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"

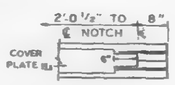
COVER PLATES 29 GA THICK



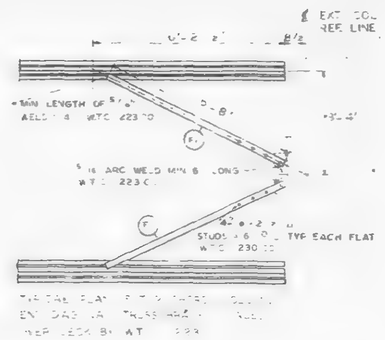
DETAIL "C" SECTION E-E

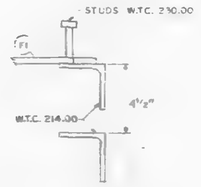
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD PLUG WELD COVER PLATE OVER END STIFFENER WTC 223.00



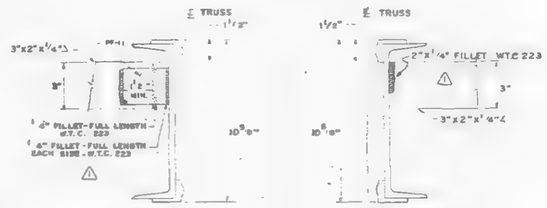
DETAIL "G"





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL.				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T23L	3	C32T23L - 35'-8"	ST223L
	T23R	3	C32T23R - 35'-8"	ST223L
BRIDGING TRUSSES	T11A	2	2T11A - 19'-11"	ST211A
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 19'-11"	ST 403
	A5	2	3"x2"x1/4"x 6'-1 15/16"	ST 403
	A6	1	3"x2"x1/4"x 6'-2"	ST 403
	A33	3	3"x2"x1/4"x 5'10 1/2"	ST 410
PATCH PLATES	PP3	16	2"x 1/4"x 0'-7"	ST 400
	PP2	16	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G	4	7"x.0135"x17'-10 1/8"	ST 303
	H	4	7"x.0135"x17'-3 1/2"	ST 303
ANGLE CLIPS	C2	12	2 1/2"x1 1/2"x1/4"x 6"	ST 400
5/8" SHEAR ANCHOR	SA1	4	5/8" REBAR x 0'-7"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 3/8"x 6'-8"	ST 402
CONNECTION BAR	CB1	6	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
CLOSURE PLATE	PP1	3	3"x1/4" x 0'-2 3/8"	ST 412

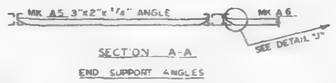


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

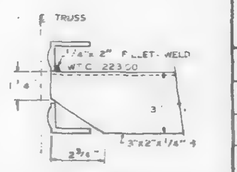
DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE

DETAIL "B1"



SECTION A-A END SUPPORT ANGLES



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
1	2-4-69	AS NOTED	G.D.C.

REF DRAG		
	AB4 3	10-5-68
	7-AB4-15 & 16	7-22-68
	7-AB4-15.2	10-4-68
	SA-124	10-11-68
	7-AB3-40	10-4-68
	7-AB1-22	10-4-68
	7-AB2-6	7-22-68

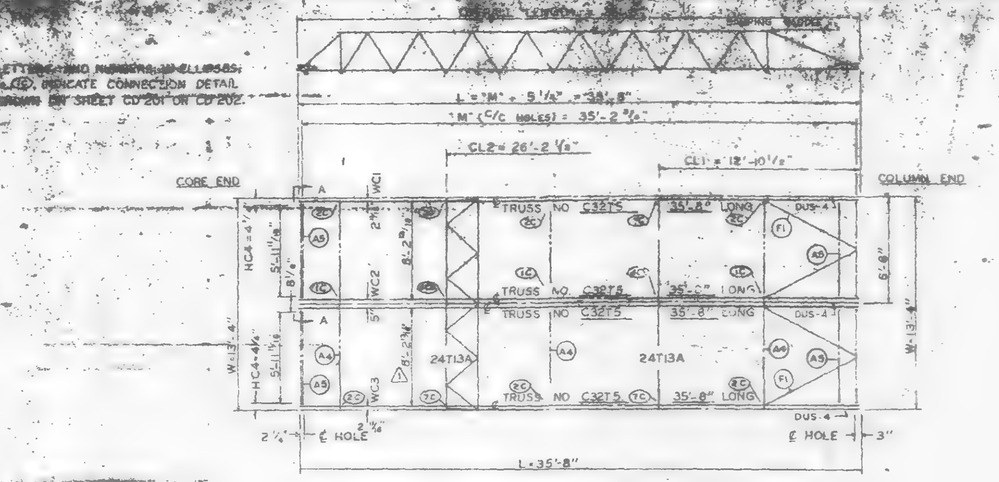
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25, 59, 92, (EAST & WEST)

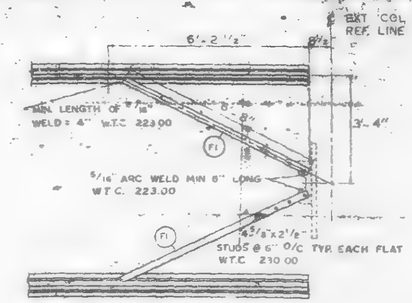
PANEL J2 - 20'-0" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-43 PLATE	
APPROVED FOR FABRICATION BY ____ FOR PONYA	DATE	DRAWN BY R.S. DATE JAN 2, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE JAN 9, 1969	
DETAILED BY A.C. WEBER		FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP-J2

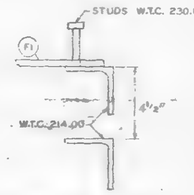
LETTERS AND NUMBERS IN ELLIPSES; e.g. (2E), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD-201 OR CD-202.



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



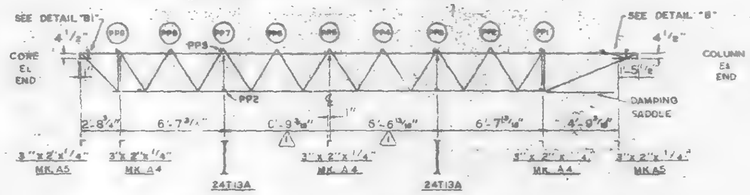
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

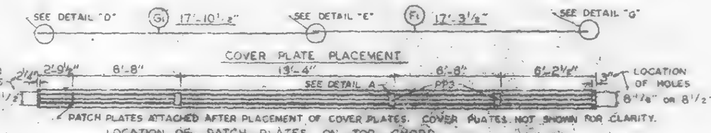


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T5	4	C32T5 35'-8"	ST 205
BRIDGING TRUSSES	T13A	2	2T13A-13-3"	ST 204
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST 403
	A5	4	3"x2"x1/4"x 6'-1 13/16"	ST 403
DIAGONAL FLATS	F	4	2" x [illegible] 8"x 6'-8"	ST 402
PATCH PLATES	PP3	8	2"x [illegible] 1/4"x 0'-7"	ST 400
	PP2	8	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7"x 0.35 x 17'-10 1/2"	ST 303
	F1	2	[illegible] 7'-3"	ST 303
ANGLE	[illegible]	8	2" x [illegible] x 1'-6"	ST 400
[illegible]	[illegible]	6	[illegible]	ST 400
[illegible]	[illegible]	4	[illegible]	[illegible]
CONNECTION BAR	[illegible]	2	[illegible]	ST [illegible]
CONNECTION PLATES	[illegible]	3	[illegible]	ST 400
	[illegible]	2	[illegible]	ST 400
	[illegible]	2	[illegible]	ST 400

PANEL NO. K1 . SIZE 13'-4" x 35'-8"

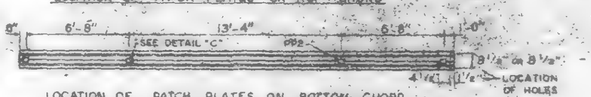




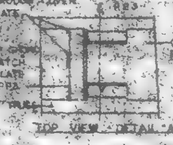
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

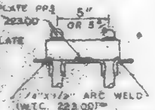
LOCATION OF PATCH PLATES ON TOP CHORD

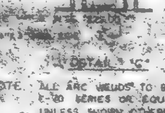


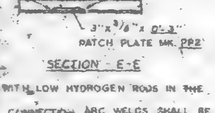
LOCATION OF PATCH PLATES ON BOTTOM CHORD



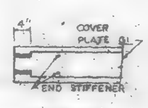
TOP VIEW - DETAIL "A"

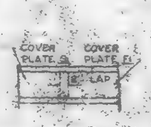






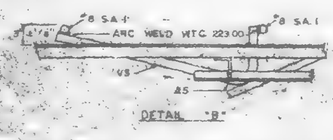
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

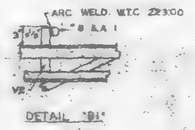


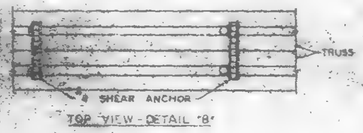


COVER PLATES 28 GA. THICK

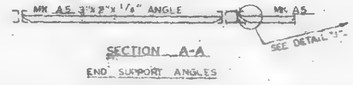
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



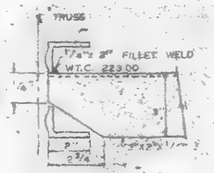




TOP VIEW - DETAIL "B"



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	
2	6-23-69	AS NOTED	GDC
1	1-11-69	AS NOTED	GDC

7-483-20	7-22-68		
AB4 [illegible]	[illegible] 68		
AB4 5 & 6	7-24-68		
AB4-39-41	7-24-68		
AB4 [illegible]	1-5-69		
AB4 [illegible]	10-15-68		
AB4 11 & 12	7-24-68		
AB4 8	7-22-68		
AB4 42 & 3	10-15-68		

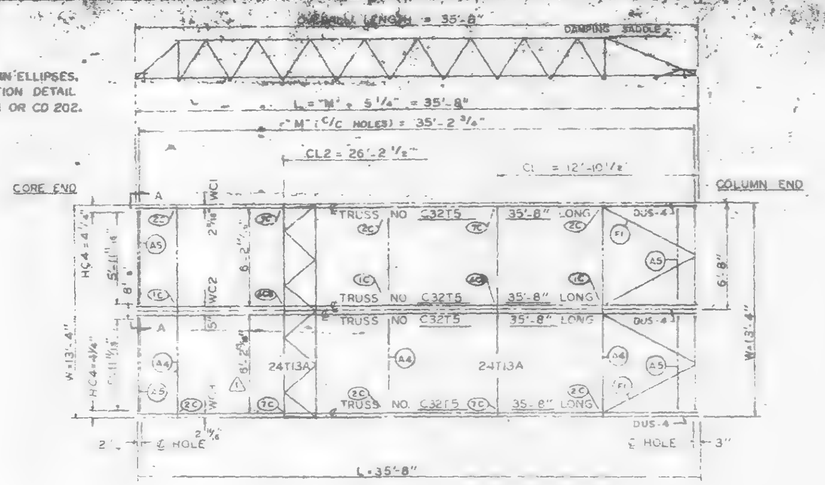
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49(WEST), 80-83(EAST)
PANEL K1 - 13'-4" x 35'-8"
BLDG. B FLOORS 45-49(SOUTH) 80-83(SHORT)

FABRICATION BY LACLEDE STEEL COMPANY

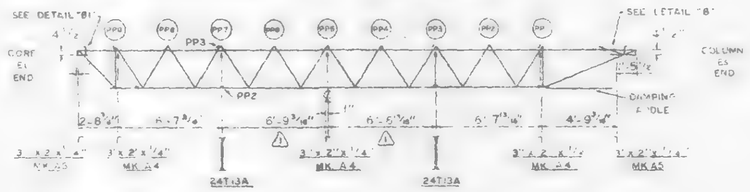
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3-20	PLATE
APPROVED FOR FABRICATION [illegible] & N.Y.A.	DATE 1/2/70	DRAWN BY [illegible]	
APPROVED FOR FABRICATION [illegible]	DATE	DATE 1-30-69	
		CHECKED BY T.M. CHURA DATE 1-30-69	
LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-K1

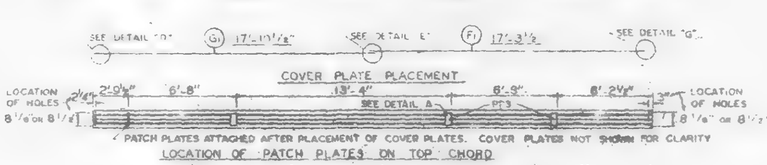
LETTERS AND NUMBERS IN ELLIPSES, ie (HC4) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.



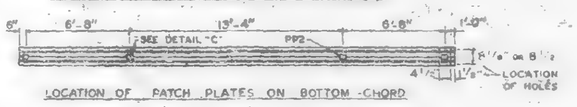
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. KR1 SIZE 13'-4" x 35'-8"

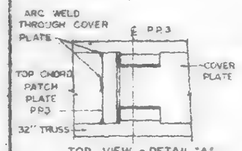




LOCATION OF PATCH PLATES ON TOP CHORD

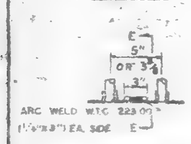


LOCATION OF PATCH PLATES ON BOTTOM CHORD

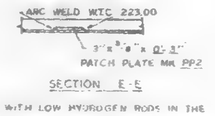


TOP VIEW - DETAIL "A"

DETAIL "A" SECTION D-D

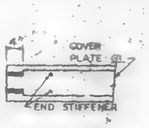


DETAIL "C"

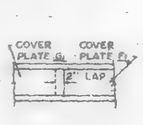


SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET



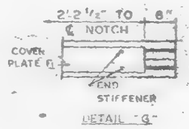
DETAIL "D"



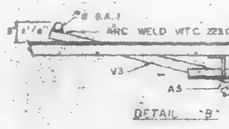
DETAIL "E"

COVER PLATES 22 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER W.I.C. 223.00

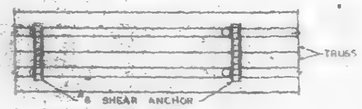


DETAIL "G"



DETAIL "B"

DETAIL "B1"



TOP VIEW - DETAIL "B"

MK A5 3 x 3 x 1/4 ANGLE

END JOINT DETAILS

& REQUIRED MATERIAL PER TRUSS

MATERIAL	MK	PCS	SIZE	REF DETAIL
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	13A	2	2T13A-13 3"	ST213A
3"x 2"x 1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST403
	A5	4	3"x2"x1/4"x 6'-1 5/8"	ST403
DIAGONAL FLATS	F1	4	1'-9"x 6'-8 x 6'-8	ST402
PATCH PLATES	PP3	8	2"x 1/4" x 0'-7"	ST400
	PP2	8	3"x 3/8"x 0'-3"	ST400
COVER PLATES	G1	2	7"x.0135"x17'-10 1/2"	ST303
	F1	2	7"x.0135"x17'-3 1/2"	ST303
ANGLE CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 6"	ST400
"B" SHEAR ANCHOR	SA1	8	3/8 REBAR x 0'-7"	ST400
[illegible] ANGLE	[illegible]	2	3" x 3" x 3/8" x 3'-6 5/8"	ST228
CONNECTION BAR	CB1	2	1" x 1'-3"	ST400
CONNECTION PLATES	P1	3	3'-8" x 3/8" x 0'-8 1/2"	ST400
	P2	2	4 1/2" x .35" = 0'-9"	ST400
	P3	2	4 1/2" x .38" x 1'-0"	ST400

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	GDG
1	5-11-69	AS NOTED	GDG

2 REF DRWG. 7-AB3-21 6-23-69
7-AB4-5 7-22-68
7-AB4-15 7-22-68
7-AB4-25 7-22-68
SA-124 1-6-65
7-AB3-21 6-23-69
7-AB1-(68) 7-22-68
7-AB2-8 7-22-68
7-AB4-5 7-22-68

FLOOR PANEL DETAILS & [illegible]
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

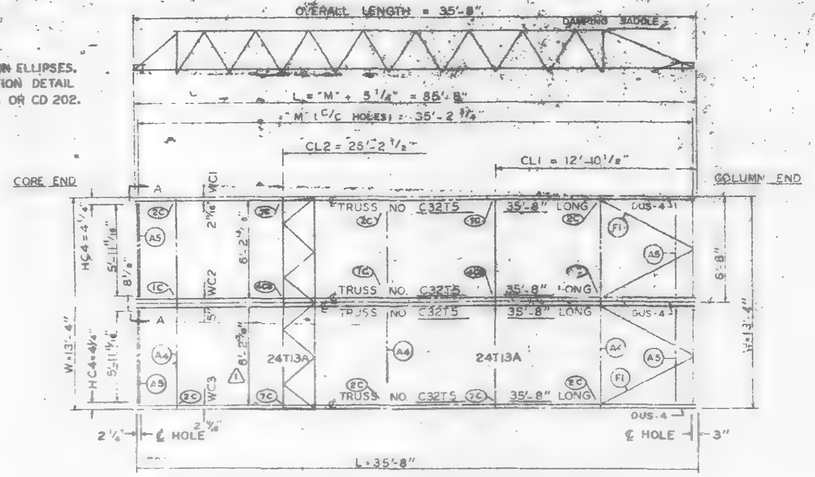
BLDG. A FLOORS 46-49(EAST), 79-83(WEST)
PANEL KR1 13'-4" x 35'-8"
BLDG B FLOORS 46-49 (NORTH) 79-83

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING 7-AB3-21
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 7-22-68
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE
DETAILED BY A.C. WEBER	DRAWN BY [illegible] DATE 1-8-68 CHECKED BY T.W. DATE 1-8-69 FABRICATION DWG. NO. W.T.C. 2 KR1

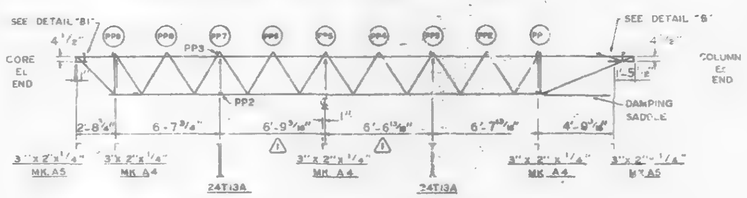
LACLEDE STEEL CO.

LETTERS AND NUMBERS IN ELLIPSES, e.g. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

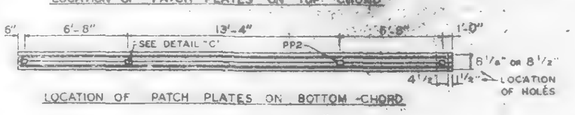


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

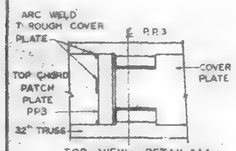
PANEL NO. KR1 SIZE 13'-4" x 35'-8"



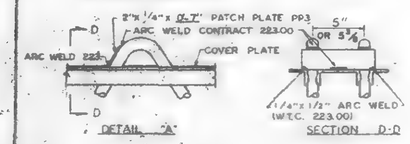
LOCATION OF PATCH PLATES ON TOP CHORD



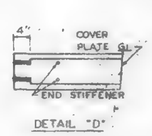
LOCATION OF PATCH PLATES ON BOTTOM CHORD



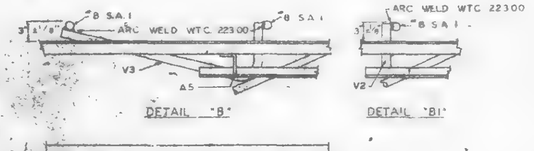
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



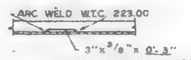
DETAIL "D" DETAIL "E"



DETAIL "B" DETAIL "B1"

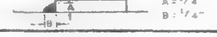
TOP VIEW - DETAIL "B"

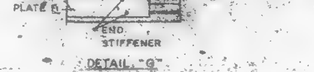
DETAIL "C"



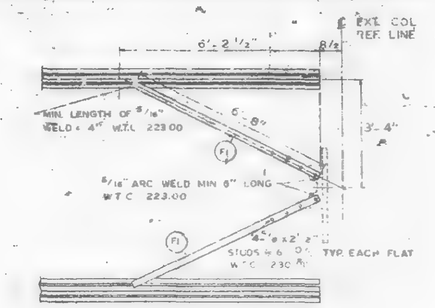
SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ± 1/16" FULL THROAT FILLET.

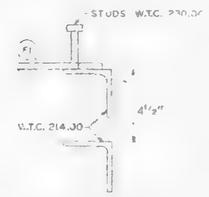




DETAIL "G"



TYPICAL PLAN OF TOP CHORD AT ENDS OF TRUSS BRACED AT END DIAGONAL TRUSS BRACES AND OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T3A	2	2T13A-13'-3"	ST213A
3"x 2"x 1/4" ANGLE	A4	3	3"x2"x1'-4"x13'-3"	ST403
	A5	4	3"x2"x1'-4"x6'-1 13/16"	ST403
DIAGONAL FLATS	F1	4	1'-2 3/8" x 6'-8"	ST402
PATCH PLATES	PP3	8	2"x 0'-4" x 0'-7"	ST 400
	PP2	8	3"x 3/8" x 0'-3"	ST 400
COVER PLATE	G1	2	7"x 0'-8 1/2" x 7'-3 1/2"	ST 305
	F1	2	7" x 0'-8 1/2" x 7'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2"x 3 1/2" x 1'-4" x 6"	ST 400
[illegible]	[illegible]	[illegible]	[illegible]	ST 400
[illegible]	[illegible]	[illegible]	[illegible]	ST 298
[illegible]	[illegible]	2	[illegible]	ST 400
CONNECTION PLATES	P1	3	3'-2" x 1'-8" x 0'-0.75"	ST 400
	P2	2	4 1/2" x .38" x 0'-9"	ST 400
	P3	2	4 1/2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	G.D.
1	3-11-69	AS NOTED	G.D.

	REF DWG	
	7-A63-21	7-22-68
	A84-41	3-11-69
	7-A63-2 & 5	7-22-68
	A84-39-41	7-22-68
	S1-A1	1-6-69
	7-A63-2	3-11-69
	7-S3, 1 & 2	7-22-68
	7-A84-8	7-22-68
	A84-42 & 43	2-13-69

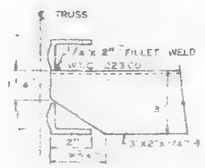
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46-49 (EAST), 79-83 (WEST)

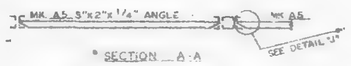
PANEL KR1 - 1 ℄ @ 35'-9"

BLDG. B FLOORS 46-49 (NORTH) 79-83 (SOUTH) (2)

FABRICATION BY	LACLEDE STEEL COMPANY
FABRICATED AT	MADISON, ILLINOIS
DESIGN DRAWING NO.	7-A63-21
PLATE	
APPROVED FOR FABRICATION BY	James Wahnke DATE 1/2/70
DRAWN BY	DATE 1-30-69
APPROVED FOR FABRICATION BY	FOR FABRICATOR
CHECKED BY	T.M. HUNA DATE 1-30-69
DETAILED BY	A.C. WEBER
FABRICATION CONT. NO.	T-C 251
SHEET NO.	FP KR1

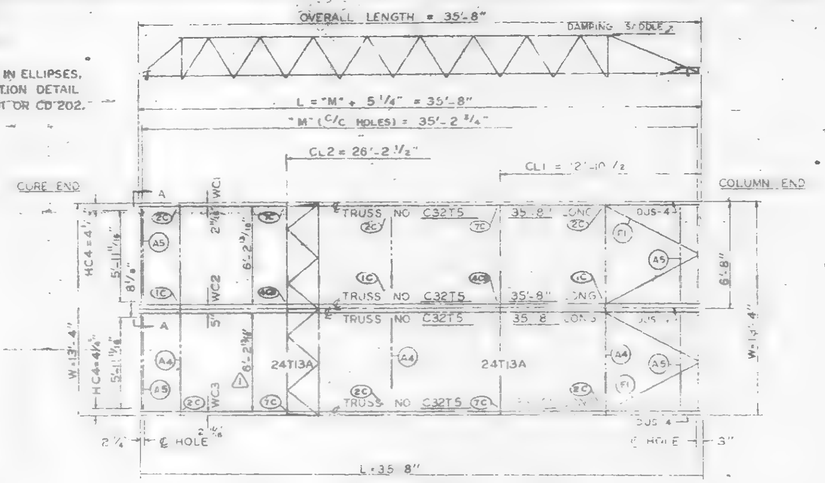


DETAIL "J" END SUPPORT ANGLE ATTACHMENT



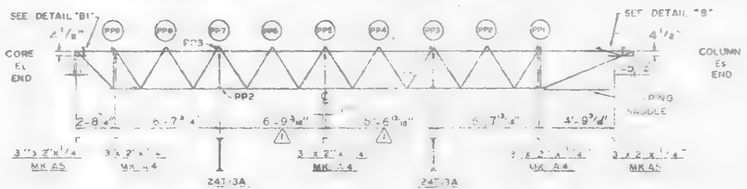
SECTION A-A
END SUPPORT ANGLES

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

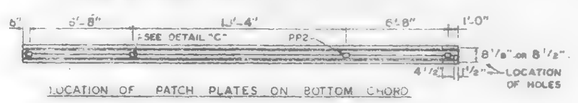


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

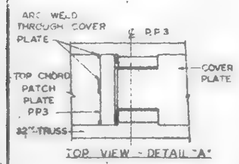
- PANEL NO. K1 . SIZE 13'-4" x 35'-8"



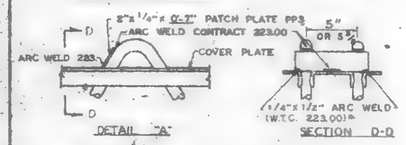
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



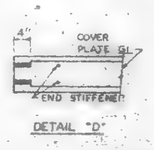
TOP VIEW - DETAIL "A"



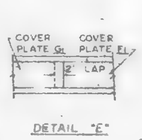
DETAIL "A" SECTION D-D

DETAIL "C" SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET



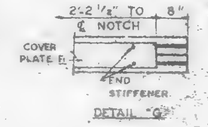
DETAIL "D"



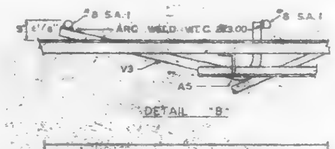
DETAIL "E"

COVER PLATES 1/4" GA. THICK

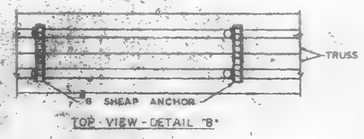
FIELD WELDED COVER PLATE END STIFFENER W.T.C. 223.00



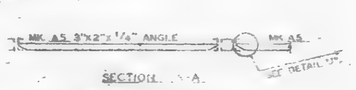
DETAIL "G"



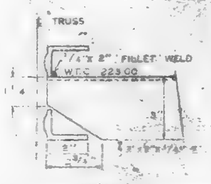
DETAIL "B" DETAIL "B1"



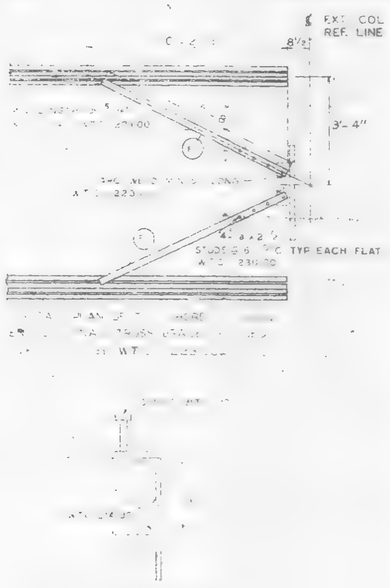
TOP VIEW - DETAIL "B"



SECTION J-J
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE AT TRUSS



CLIP ANGLE LOCATION FOR [illegible] ABOVE COLUMN TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A-13-3	ST203
3"x 2"x 1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST403
	A5	4	3"x2"x1/4"x6'-8 15/16"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	8	2"x 1/4"x 0'-7"	ST400
	PP2	8	3"x 3/8"x 0'-3"	ST400
COVER PLATES	G1	2	7"x 0.35 x 7'-10 1/2"	ST303
	F1	2	7"x 0.35 x 7'-3"	ST303
ANGLE CLIPS	C2	8	2 1/2"x 2 1/2"x 1/4"x 8"	ST400
[illegible]			2 REQ'D	ST400
[illegible] SADDLE		2	3"x 4"x [illegible]	ST298
[illegible] BAR	CB1	2	1" ø x 1'-3"	ST400
CONNECTION PLATES	P1	3	3 1/2"x [illegible]	ST400
	P2	2	4 1/2"x 1'-9"x [illegible]	ST400
	P3	2	4 1/2"x 3'-0"x [illegible]	ST400

NO.	DATE	REVISION	BY
2	6-23-69	AS NOTED	GDC
1	3-11-69	AS NOTED	GDC

REF DRWG

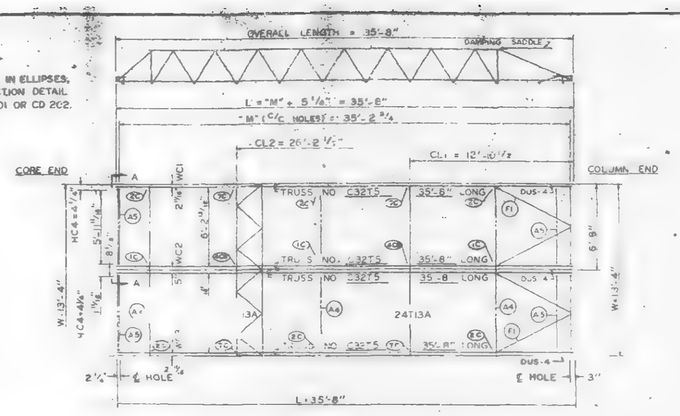
7-AB3-20	7-22-68
7-AB3-1	1-3-68
7-AB1-5 & 16	7-22-68
7-AB4-39-41	7-22-68
SA 124	1-5-65
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-8	7-22-68
7-AB4-42 & 43	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49(WEST), 80-83(EAST)
PANEL K1
BLDG. B FLOORS 45-49(SOUTH) 80-83(NORTH) (2)

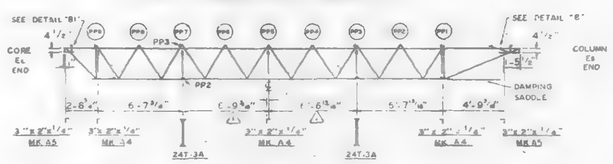
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-20
APPROVED FOR FABRICATION BY [illegible] FOR PA
DATE 1/2/70
DRAWN BY [illegible]
DATE 1-30-69
APPROVED FOR FABRICATION
DATE
CHECKED BY T.M. CHOPEK
DATE 1-30-69
DETAILED BY LACLEDE STEEL CO.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. [illegible]

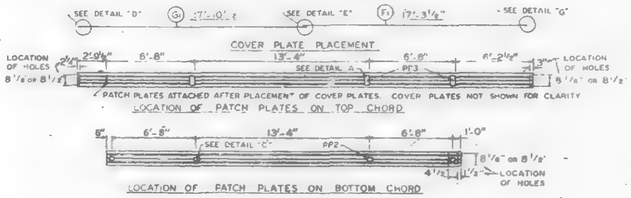
LETTERS AND NUMBERS IN ELLIPSES, THUS, INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

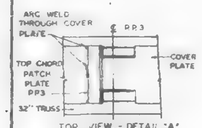


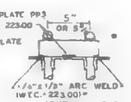
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

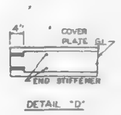
PANEL NO K1 . SIZE 13'-4" x 35'-8"

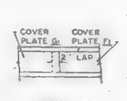


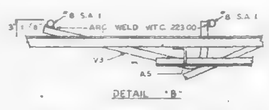


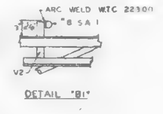


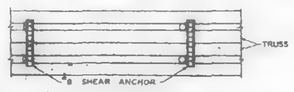




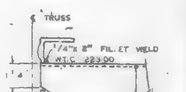


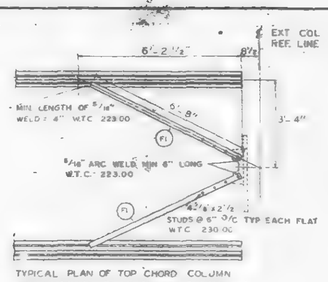






NOTES:
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 15" FULL THROAT FILLET.





REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13A	2	2T13A-13'-3"	ST213A
3"x2"x1/4" ANGLE	A4	3	3"x2"x1/4"x13'-3"	ST403
	A5	4	3"x2"x1/4"x 6'-7 3/4"	ST404
DIAGONAL FLATS	F1	4	1'-2"x 8 7/8"x 8'-8"	ST402
PATCH PLATES	PP3	8	2"x 1/4"x 0'-7"	ST 400
	PP2	8	3"x 5/16"x 0'-3"	ST 400
COVER PLATES	G1	2	7'x 0.135"x 17'-10"	ST 303
	F1	2	7'x 0.135"x 7'-3"	ST 303
ANGLE [illegible]	C2	8	2"x 2"x 1/4"x 6"	ST 400
"B SHEAR [illegible]	SA	6	"B REBAR x 0'-7"	ST 400
[illegible] RADDLE	DUS-4'	2	3'-4 3/4"x 1'-8 1/4"x 6"	ST 218
[illegible] BAR	CB1	2	1"Ø x 1'-3"	ST 400
CONNECTION PLATES	C	3	3'-7"x 3"x 6'-1 3/4"x 0'-6 3/4"	ST 400
	F2	2	4'-7"x .39"x 6'-1 3/4"	ST 400
	P3	2	4'-7"x .39"x 1'-0"	ST 400

NO	DATE	REVISION	BY
1	3-11-69	AS NOTED	GDF

REF DRWG

7-AB3-20	7-22-68
7-AB4-4 & 31	1-3-68
7-AB4-5 & 15	7-22-68
7-AB4 39-41	7-22-68
SA-124	6-5-69
7-AB3-2	1-3-68
7-AB1-11 & 12	7-22-68
7-AB2-8	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

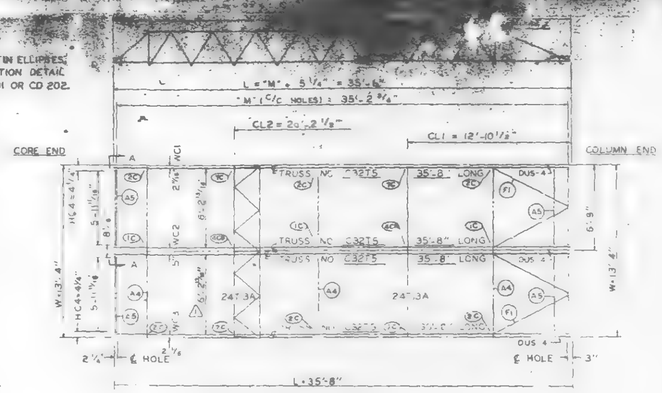
BLDG. A FLOORS 45-49(WEST), 80-83(EAST)

PANEL K1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

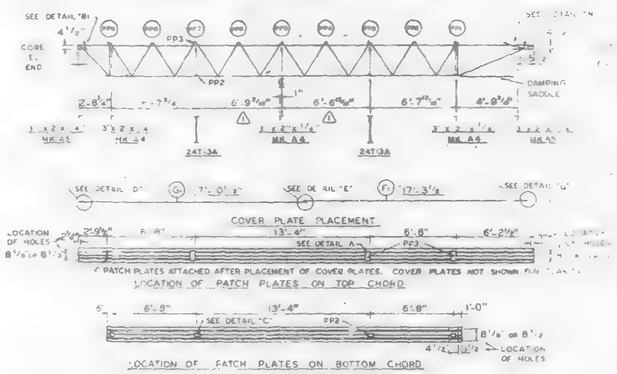
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-20 PLATE
APPROVED FOR FABRICATION DATE 12/16/69 FOR P.O.N.Y.A.	DRAWN BY [illegible]
APPROVED FOR FABRICATION DATE	DATE 1-30-69
BY FOR FABRICATION	CHECKED BY T.M. CHIARA
	DRWG 1-30-69
LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221 SHEET NO. FP-K1

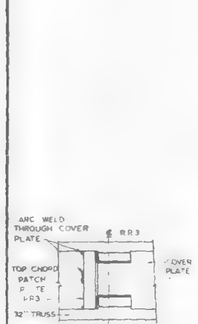
LETTERS AND NUMBERS IN ELLIPSES (A16) INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

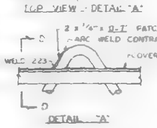


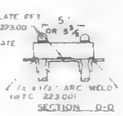
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

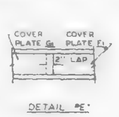
PANEL NO KR1 SIZE 13'-4" x 35'-8"







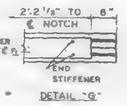


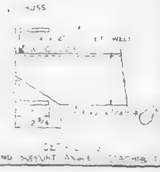


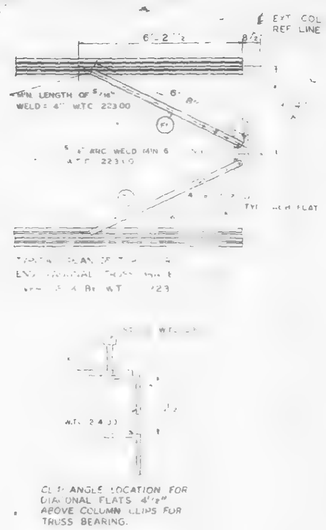
COVER PLATES 28 GA THICK

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD PUNCH COVER PLATE OVER END STIFFENER WTC 223.00







REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST 205
BRIDGING TRUSSES	24T3A	2	24T3A-13'-3"	ST 213A
[illegible] ANGLE	A6	3	3"x2"x 4"x13'-3	ST 403
	A5	4	3"x2"x 4"x6'-[illegible]"	ST 403
[illegible] AL PLATES	F	4	1" x 5 8" x 6'-8	ST 402
PATCH PLATES	PP3	8	2" x [illegible]" x 0'-7"	ST 400
	PP2	8	3" x 3 8" x 0'-3"	ST 400
[illegible] PLATE	[illegible]	2	[illegible] x 0'-3 5/16"	ST 303
	F1	2	7" x 0'-35" x 1'-3"	ST 303
[illegible]	[illegible]	8	2" x 2 1/2" x 1'-6" x 4"	ST 400
[illegible]	[illegible]	6	[illegible]	ST 400
[illegible]	[illegible]	2	[illegible]	ST 400
[illegible]	[illegible]	2	[illegible]	ST 400
CONNECTION PLATES	F3	3	8" x 1'-3" x 0'-8" x 1"	ST 400
	G2	2	4" x 1'-3" x 0'-5"	ST 400
	G3	2	4" x 1'-3" x 1'-0"	ST 400

NO	DATE	REVISION	BY
1	3-11-69	AS NOTED	GDC

REF DRWG		
	7-AB3-21	7-22-68
	7-AB4.3 & 31	1-8-69
	7-AB4.5 & 16	7-22-68
	7-AB4.33-41	7-22-68
	[illegible]-124	1-6-69
	[illegible]-AB3	1-3-68
	7-AB1-[illegible]	7-22-68
	7-AB2-8	7-22-68
	7-AB4-42	0-13-68

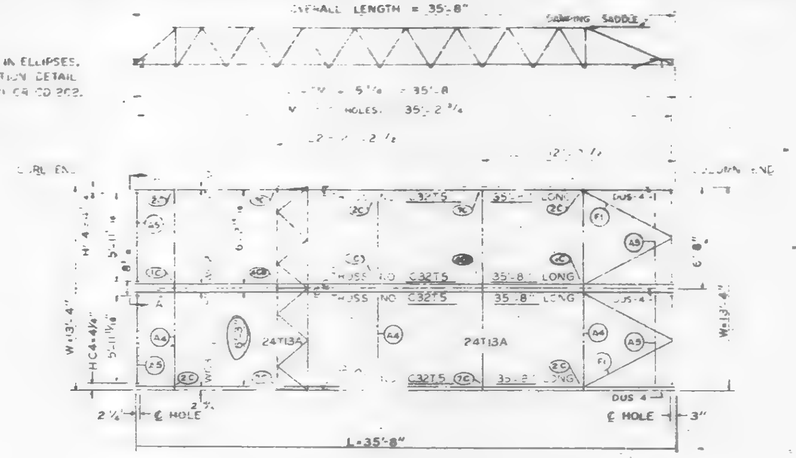
· ON PANEL DETAILS ·
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46-49 (EAST), 79-83 (WEST)

PANEL KR1 = 13'-4" x 35'-8"

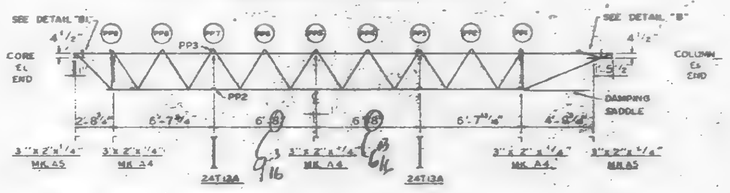
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT [illegible] ILLINOIS		DESIGN DRAWING NO 7-AB3-21	PLATE
APPROVED FOR FABRICATION OF [illegible]	DATE 3/24/69	DRAWN BY [illegible] DATE 1-20-69	
APPROVED FOR FABRICATION OF [illegible] FOR FABRICATOR	DATE	CHECKED BY J.W.CHUNG DATE 1-20-69	
[illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP-KR1

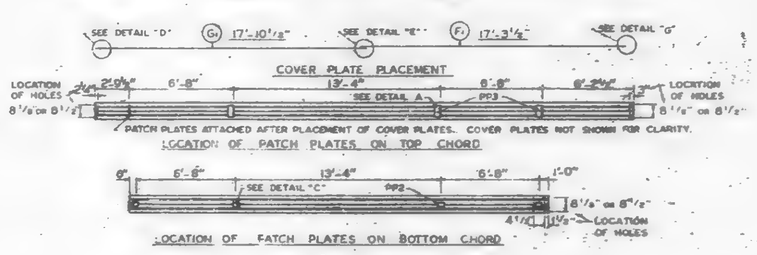
LETTERS AND NUMBERS IN ELLIPSES, e.g. (15), INDICATE CONNECTION DETAIL SHOWN ON SHEET KI-201 OR SD 202.

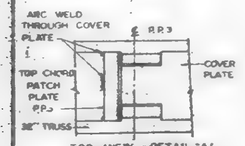


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

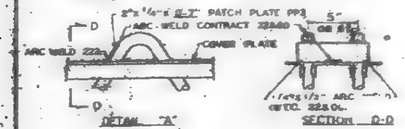
PANEL NO K1 SIZE 13'-4" x 35'-8"





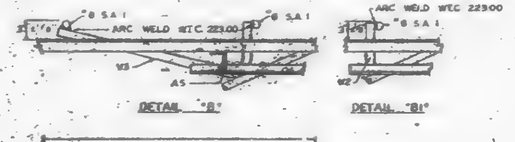


TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"



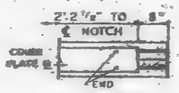
DETAIL "B" DETAIL "B1"

DETAIL "C" SECTION E-E

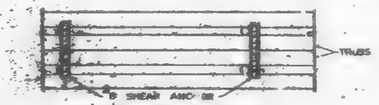
NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" FULL THROAT FILLET

COVER PLATES 29 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

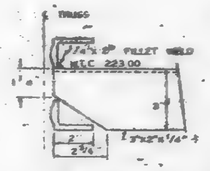


DETAIL "G"

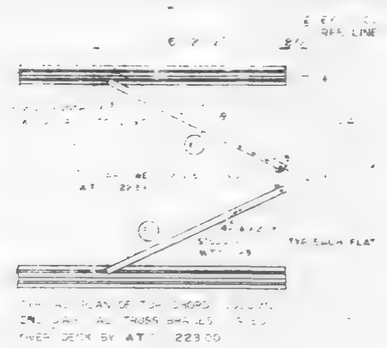


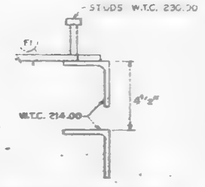
TOP VIEW - DETAIL "H"

SECTION A-A
END SUPPORT ANGLES



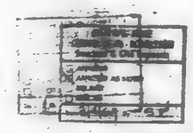
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
CHORDS	T5	4	[illegible]	ST 205
WEB MEMBERS	T34	2	2" 3A 13'-3"	ST 203
	A4	3	[illegible]	ST 403
	A5	4	[illegible]	ST 403
FLOOR PLATE	[illegible]	4	[illegible]	ST 402
PATCH PLATES	PP3	8	2 [illegible]	ST 400
	PP2	8	[illegible]	ST 400
COVER PLATES	C1	2	[illegible]	ST 303
	C2	2	3'-7" x 6 3/5 x 1'-3"	ST 303
ANGLE CLIPS	L2	8	2½ x 1½ x 1'-4" ℄ 6"	ST 400
¾" ℄ SHEAR ANCHOR	SA1	6	¾ ℄ SHEAR ANCHOR x 0'-7"	ST 400
DAMPING SADDLE	DS4	2	[illegible]	ST 298
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3/16" x 3/16" x 0'-6 1/2"	ST 400
	P2	2	4½" x .36" x 0'-9"	ST 400
	P3	2	4½" x .36" x 1'-0"	ST 400



REF DRWG		
7-AB3-20	7-22-88	
7-AB4-3 & 31	1-3-68	
7-AB4-5 & 16	7-22-88	
7-AB4-38-41	7-22-88	
SA-24	1-8-88	
7-AB3-2	1-3-68	
7-AB11-11 & 12	7-22-88	
7-AB2-8	7-22-88	
7-AB4-42	10-15-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49(WEST), 80-83(EAST)

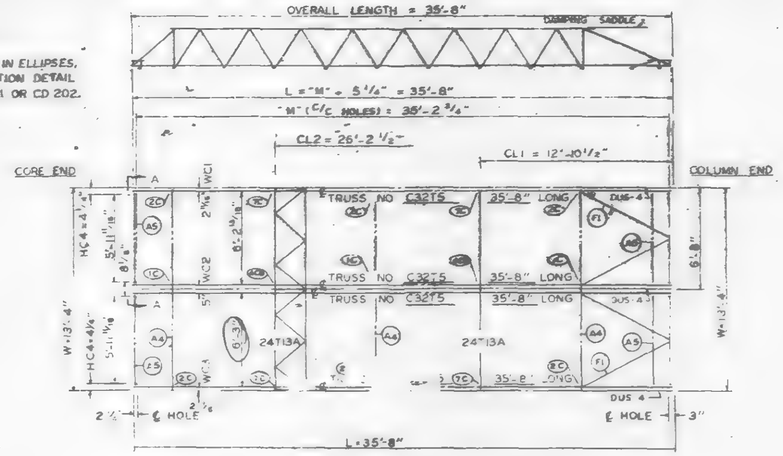
PANEL K1 - 13'-4" x 35'-8"

RECEIVED

FABRICATION BY LACLEDE STEEL COMPANY

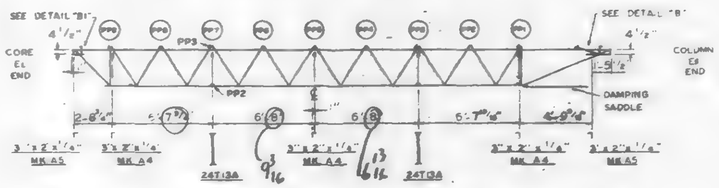
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 AB3 20	PLATE
APPROVED FOR FABRICATION BY FOR PONTA	DATE	DRAWN BY B.S. DATE 1-30-68	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.M.CHUBA DATE 1-30-68	
LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO FP-K1

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202.

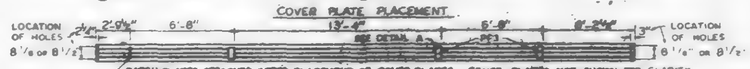


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. KR1 SIZE 13'-4" x 35'-8"

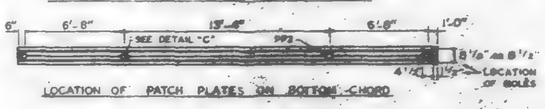


COVER PLATE PLACEMENT

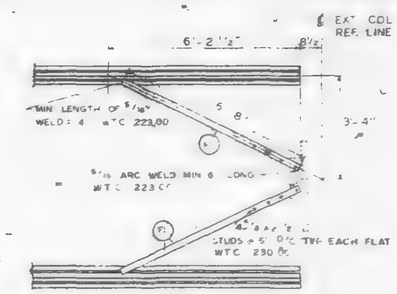


PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

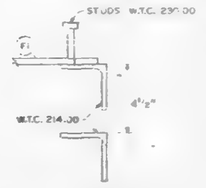
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

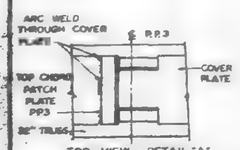


TYPICAL PLAN OF TOP CHORD AT JOINT END DIAGONAL TRUSS BRACES PLATED OVER DECK W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	4	C32T5 - 35'-8"	ST295
BRIDGING TRUSSES	T13A	2	2T13A-13'-3"	ST294
3"x2"x1/4" ANGLE	A4	3	3"x2"x1'-6"x13'-3"	ST 403
	A5	4	3"x2"x1'-6"x8'-5 13/16"	ST 403
DIAGONAL FLATS	F1	4	1'-2"x5/8"x5'-8"	ST 402
PATCH PLATES	PP3	8	2"x1/4"x 0'-7"	ST 400
	PP2	8	3"x5/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7"x 0.135"x 17'-10 1/2"	ST 303
	F1	2	7"x 0.135"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	3 1/2 x 1 1/2 x 1/4" x 6"	ST 400
5/8" ø SHEAR ANCHOR	SA1	6	5/8 ø REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS4	2	3'-2"x 3'-2"x 5/8"x 3 6 7/8"	ST298
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3'/8" x 5/8" x 0'-6 1/8"	ST 400
	P2	2	4 1/2" x .38" x 0'-9"	ST 400
	P3	2	4 1/2" x .38" x 1'-0"	ST 400



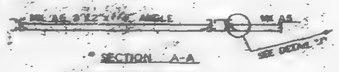
TOP VIEW - DETAIL "A"

DETAIL "A" SECTION D-D

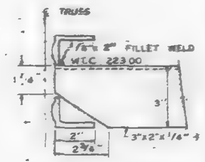
DETAIL "C"

SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ø 1" FULL THROAT FILLET.



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF DRWG

7-A82-21	7-22-68
7-A84-3 & 31	1-6-69
7-A84-15 & 16	7-22-68
7-A84-38-41	7-22-68
SA 124	1-6-69
7-A83-2	1-3-69
7-A81-11 & 12	7-22-68
7-A82-8	7-22-68
7-A84-42	1-3-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

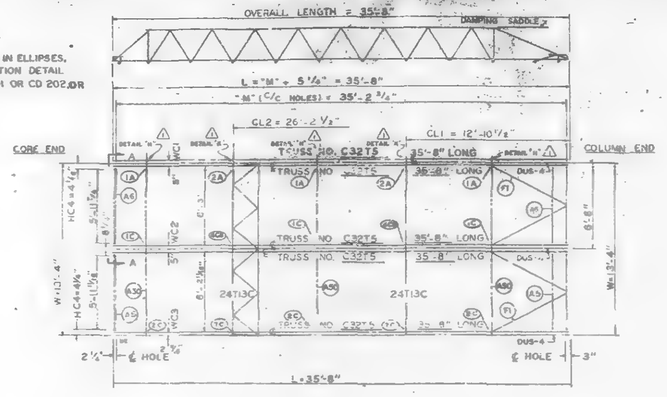
BLDG. A FLOORS 46-49(EAST), 79-83(WEST)

PANEL KR1 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY

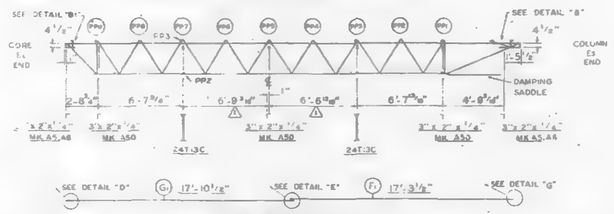
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A82-21	
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	DATE 1-30-68	
DETAILED BY A.C. WEBER		CHECKED BY	
		DATE 1-30-68	
		FABRICATION ORD. NO. W.T.C. 221	

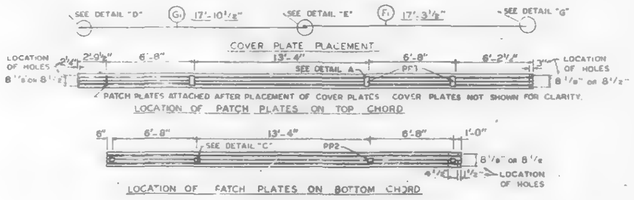
LETTERS AND NUMBERS IN ELLIPSES, (A) (C2), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD229

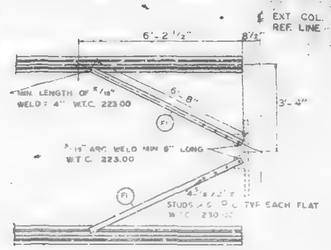


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

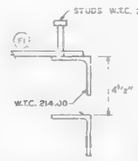
PANEL NO. M1 - SIZE 13'-4" x 35'-8"



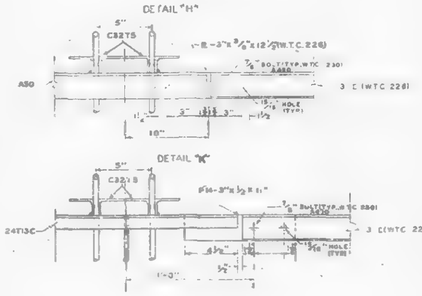




TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



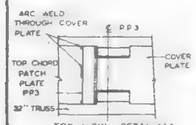
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



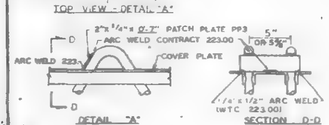
REQUI					
MAT					
FLOOR TRUSSES	T5	3			
BRIDGING TRUSSES	T13C	2	2"13C - 14'-1 5/8"		ST 202
3"x2"x1/4" ANGLE	A50	3	3"x2"x1/4"x14'-1 5/8"		ST 413
	A5	2	3"x2"x1/4"x8'-7 5/8"		ST 403
	A6	2	3"x2"x1/4"x8'-2		ST 403
DIAGONAL FLATS	F1	4	4 1/2"x5 3/8"x8'-8"		ST 402
PATCH PLATES	PP3	12	2"x1/4"x 0'-7"		ST 400
	PP2	12	3"x 3/8"x 0'-3"		ST 400
COVER PLATES	G1	3	7"x.0135"x17'-10 1/2"		ST 303
	F1	3	7"x.0135"x17'-3 1/2"		ST 303
[illegible] CLIPS	C2	8	2 1/2 x 1 1/2 x 1/4" x 6"		ST 400
3/4" ℄ SHEAR ANCHOR	SA1	9	3/4" ℄ REBAR A 0'-7"		ST 400
DAMPING SADDLE	DUS-4	3	3"x"x 3 1/2"x 3/8"x3'-6 5/8"		ST 288
CONNECTION BAR	CB1	2	1" ℄ x 1'-3"		ST 400
CONNECTION PLATES	P1	3	3'-7" x 1 1/2" x C-6 2		ST 400
	P2	2	4'-2" x .39" x 0'-9		ST 400
	P3	2	4'-2" x .30" x 1'-0"		ST 400
	P14	2	3" x 3" ℄ x 0'-11"		ST 400

NO	DATE	REVISIO	BY
1	3-11-69	AS NOTED	GDC

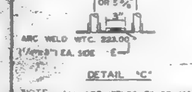
REF DRWG		
	7-AB3-22	7-22-68
	7-AB4-3 & 31	1-8-68
	7-AB4-15 & 16	7-22-68
	7-AB4-30, 41	7-22-68
	SA-124	1-6-69
	7-AB3-2	1-8-68
	7-AB1-11 & 12	7-22-68
	7-AB2	7-22-68
	7-AB4-[illegible]	10-15-68



TOP VIEW - DETAIL "A"



DETAIL "A" SECTION D-D



DETAIL "C"

SECTION E-E

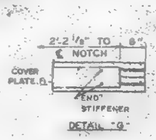
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" = 1" FULL THROAT FILLET.

DETAIL "D"

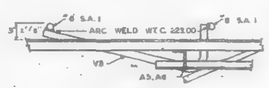
DETAIL "E"

COVER PLATES 28 GA. THICK

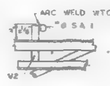
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00



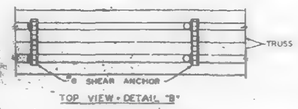
DETAIL "G"



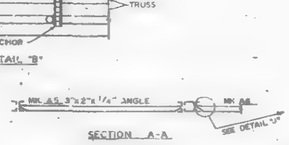
DETAIL "B"



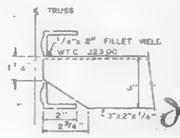
DETAIL "B1"



TOP VIEW - DETAIL "B"



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE AT TRUSS BEARING

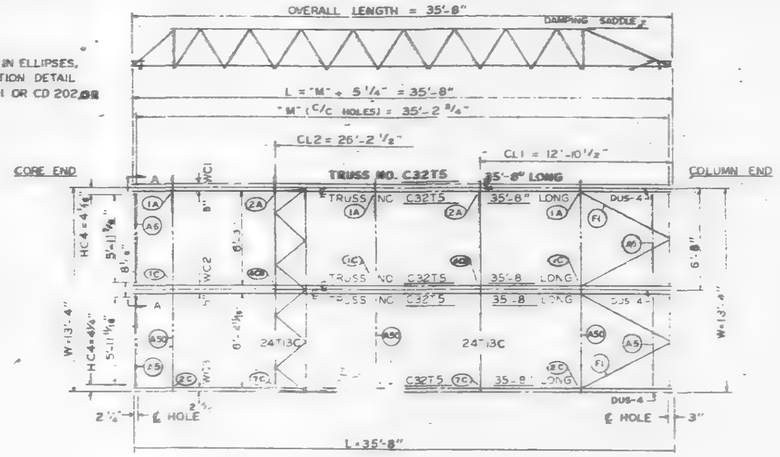
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. Y. C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-49 (WEST), 80-83 (EAST)

PANEL M1 - 13'-4" X 35'-8"

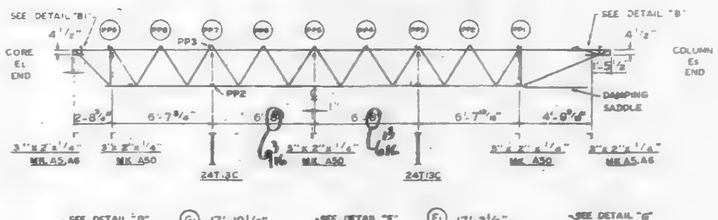
FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-22	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 3/24/69	CRAWN BY [illegible]	
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	DATE 1-29-69	
		CHECKED BY T.M. CHUBA DATE 1-28-69	
LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP-M1
DETAILED BY [illegible]			

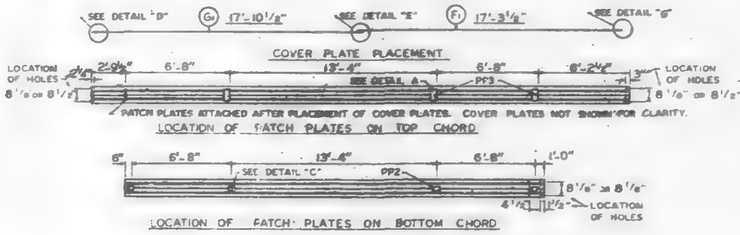
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202 OR CD220

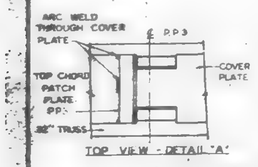


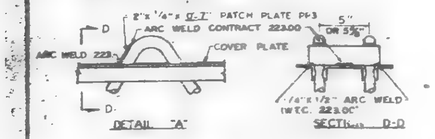
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

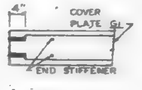
PANEL NO M1 SIZE 13'-4" x 35'-8"

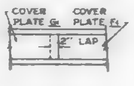


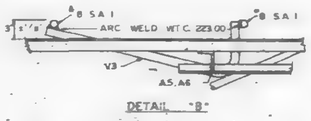


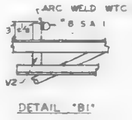




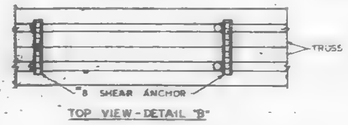


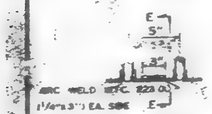




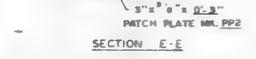


COVER PLATES 20 GA. THICK

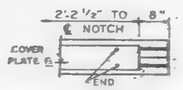


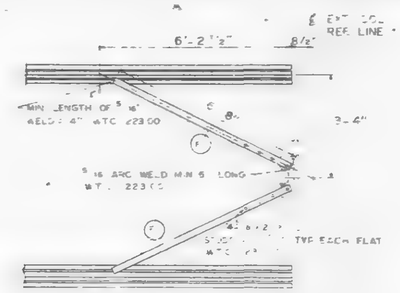


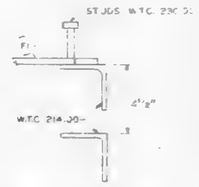
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ℄ FULL THROAT FILLET.

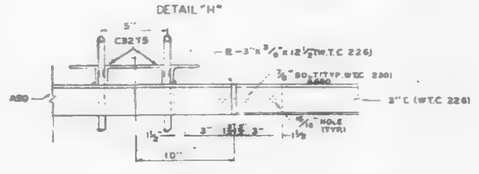


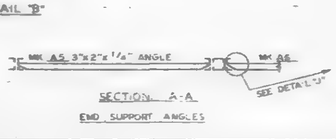
FIELD PUNCH COVER PLATE OVER END STIFFENER W.T.C. 223.00

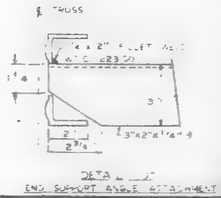












REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	24T13C - 14'-1 1/2"	ST213C
3"x2 x 1/4" ANGLE	A50	3	3"x2"x1/4"x14'-1 1/2"	ST412
	A5	2	3"x2"x1/4"x6'-[illegible]"	ST403
	A6	2	3"x2"x1/4"x6'-2"	ST403
DIAGONAL FLATS	F	4	1 1/2"x 5/8"x 6'-8"	ST402
PATCH PLATES	PP3	12	2"x [illegible]"x 0'-7"	ST400
	PP2	12	3"x 8"x 0'-3"	ST400
COVER PLATES	G1	3	[illegible] x 0.135 x 7'-10 1/8"	ST303
	F1	3	[illegible] x 0.135 x 7'-3 1/2"	ST303
ANGLE	[illegible]	2	8 2"x [illegible] x 6"	ST400
[illegible]	[illegible]	3	[illegible]	ST400
[illegible]	[illegible]	3	[illegible]	T298
BAR	CB	2	[illegible]	ST400
CONNECTION PLATES	P1	3	3/8"x 3"x 1'-6 1/2"	ST400
	P2	2	4 3/8"x .38"x 0'-9"	ST400
	P3	2	4"x 7"x .38"x 1'-0"	ST400
	P4	2	3"x 1/2" x 0'-11"	ST409

REF. FLAG		
	7-A83-22	7-22-68
	" A84 3 & 3	7-22-68
	" A84-5 & 16	7-22-68
	" 454-39-41	7-22-68
	SK-124	1-6-69
	7-A83-2	1-3-68
	7-A84-11 & 12	7-22-68
	7-A82	7-22-68
	7-A84-42	10-15-68

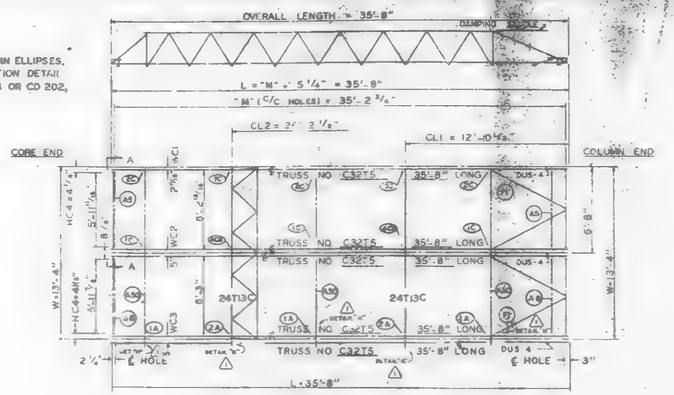
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 45-49 (WEST), 80-83 (EAST)

PANEL M1 - 13'-4" x 35'-8"

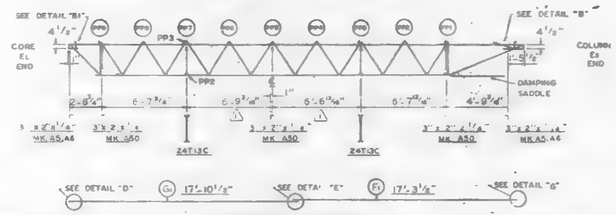
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-22	PLATE
APPROVED FOR FABRICATION BY ____ FOR PONYA	DATE	DRAWN BY [illegible] DATE 11-28-69	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE 1-28-69	
LACLEDE STEEL CO.		FABRICATION CONT. NO. WTC 221	SHEET NO. FP-M1

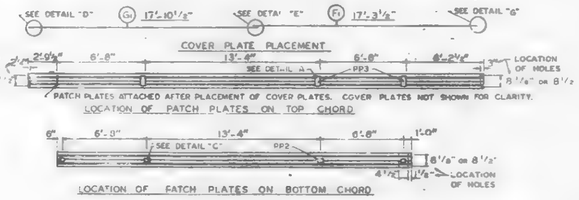
LETTERS AND NUMBERS IN ELLIPSES, (A1), (1A), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229

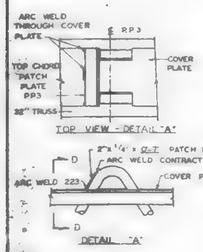


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

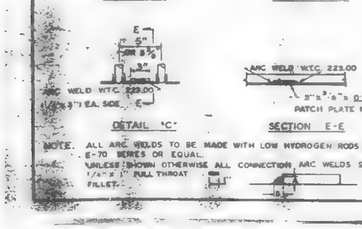
PANEL NO. MR1 SIZE 13'-4" x 35'-8"

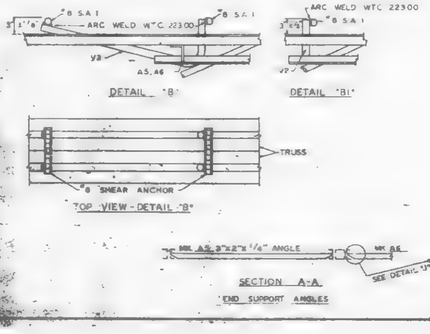


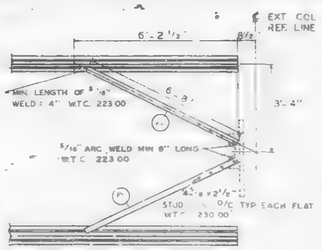




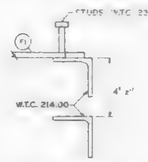
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.





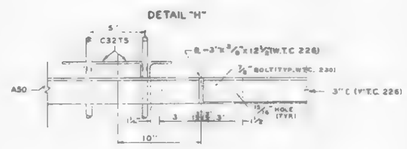


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

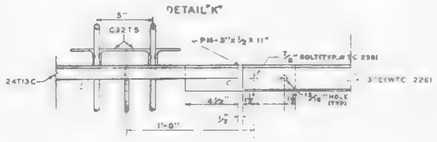


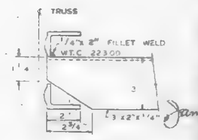
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "H"



DETAIL "K"





REQUIRED MATERIAL PER BAY				
MATERIAL	MK	PCS	SIZE	DET. NO.
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2"	ST213C
3"x 2"x 1/4" ANGLE	A50	3	3"x2"x1/4"x16'-1 1/2"	ST 402
	A5	2	3"x2"x1/4"x 6'-1 3/4"	ST 403
	A6	2	3"x2"x1/4"x 8'-2"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x 8 3/8"x 8'-8"	ST 402
PATCH PLATES	PP3	12	2"x 1/4" x 0'-7"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	G1	2	7" x 0.35"x 17'-10"	ST 303
	F1	3	7" x 0.35"x 17'-3 1/2"	ST 303
ANGLE CLIPS	C2	8	2 1/2" x 1 1/2" x 4"	ST 400
8" SHEAR ANCHOR	SA1	8	8" REBAR x 0'-7"	ST 400
DAMPING SADDLE	DUS4	3	3 x 3 x 2'x 3/8 x 3 6 1/8"	ST 298
INJECTION BAR	C81	2	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3/4" - 3/4" x 0'-6 1/2"	ST 400
	P2	2	4 1/2" x .38" x 0'-9"	ST 400
	P3	2	4 1/2" x .38" x 1'-0"	ST 400
	PH4	2	3" x 1/8" x 0'-11"	ST 409

NO	DATE	REVISION	D.O.C.
1	3-11-69	AS NOTED	

SEE SHEETS		
7-AB3-23	7-22-68	
7-AB4 1 & 3	1-3-68	
7-AB4 5 & 6	7-22-68	
7-AB4 39-3	7-22-68	
SA 23	1-6-69	
7-AB3	1-3-68	
7-AB4 R-2	7-22-68	
7-AB4	7-22-68	
7-AB4 42	10-15-68	

FOR MISCELLANEOUS DETAILS
OF
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46-49(EAST), 79-83(WEST)

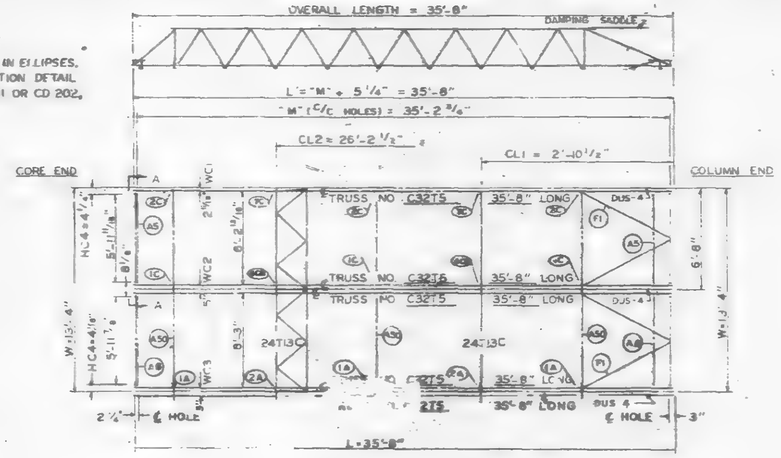
PANEL MR1 - 13'-4" x 35'-8"

FABRICATION BY LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY FOR PONYA — DATE 3/26/69
APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE
DETAILED BY A.C. WEBER

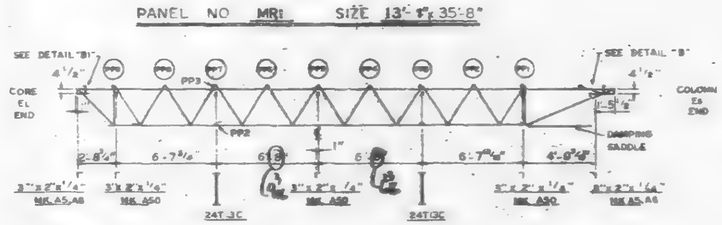
DESIGN DRAWING NO. 7-AB3-23 PLATE
DRAWN BY R.S.
DATE 1-20-69
CHECKED BY T.M. CHUBA
DATE 1-28-69
FABRICATION CONT NO. W.T.C. 221
SHEET NO. P2-MR1

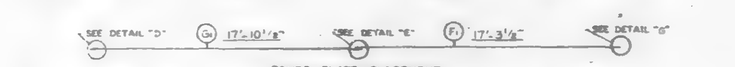
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAIL SHOWN ON SHEET CD 201 OR CD 202, OR CD 229



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

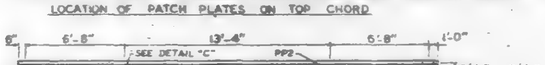
PANEL NO MR1 SIZE 13'-1" x 35'-8"



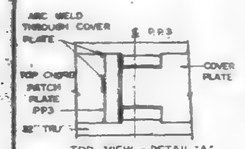


COVER PLATE PLACEMENT

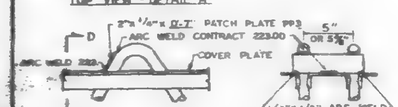
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



TOP VIEW - DETAIL "A"

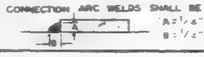


DETAIL "A" SECTION D-D

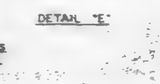
DETAIL "C"

SECTION E-E

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" ± 1" FULL THROAT FILLET



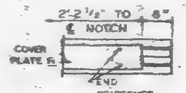
DETAIL "D"



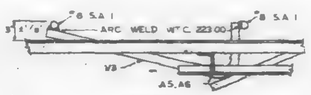
DETAIL "E"

COVER PLATES 28 GA. THICK

FIELD PUNCH COVER PLATE OVER END STIFFENER WTC. 223.00



DETAIL "G"

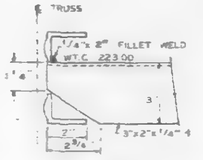


DETAIL "B"

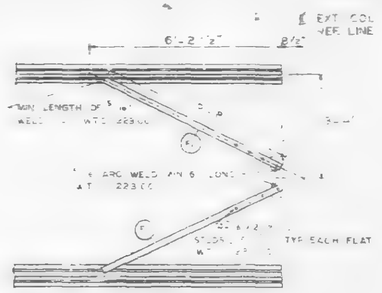
DETAIL "B1"

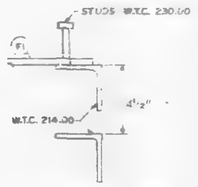
TOP VIEW - DETAIL "B"

SECTION A-A
END SUPPORT ANGLES



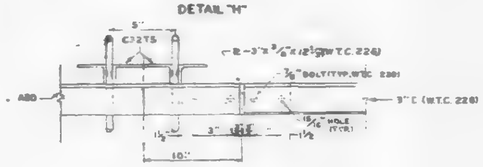
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



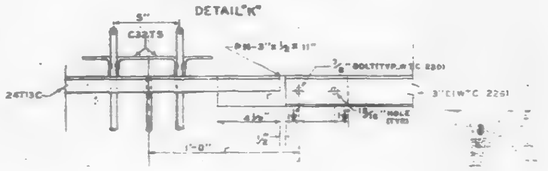


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL "H"



DETAIL "K"



REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T5	5	C32T5 - 35'-8"	ST205
BRIDGING TRUSSES	T13C	2	2T13C - 14'-1 1/2	BT213C
3"x2"x 1/4" ANGLE	A50	3	3"x2"x1'-4"x14'-1 1/2"	ST412
	A5	2	3"x2"x1'-6"x6'-1 13/16"	ST403
	A6	2	3"x2"x1'-6"x6'-2"	ST403
DIAGONAL FLATS	F1	4	8 1/2" x 8"x 5'-8"	ST402
PATCH PLATES	PP3	12	3" x 1'-4" x 0'-7"	ST 400
	PP2	12	3" x 3" x 0'-3"	ST 400
COVER PLATES	G1	3	" x 0.035" x 7'-10"	ST 303
	F	3	7" x 0.035" x 7'-3"	ST 303
ANGLE CLIPS	C2	8	8" x 1/2" x 1'-6" x 6"	ST 400
STUD SHEAR ANCHOR	SA	8	" ø STUD x 7"	ST 400
DAMPING SADDLE	DUS4	3	3"x 3"x 3"x 6"	ST298
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3"x" x 3/8" x 0'-6 1/2"	ST 400
	P2	2	4" x" x .38" x 0'-8"	ST 400
	P3	2	4" x" x .38" x 1'-0"	ST 400
	P4	2	3" x 1" x 0'-11"	ST 400

REF. DRWG		
7-AB3-28	7-22-68
7-AB4-3 & 3	1-3-68
7-AB4-5 & 6	7-22-68
7-AB4-39-41	7-22-68
SA-124	1-6-69
7-AB3-2	1-3-68
7-AB1-1&2	7-22-68
7-AB2	7-22-68
7-AB4-42	10-15-68

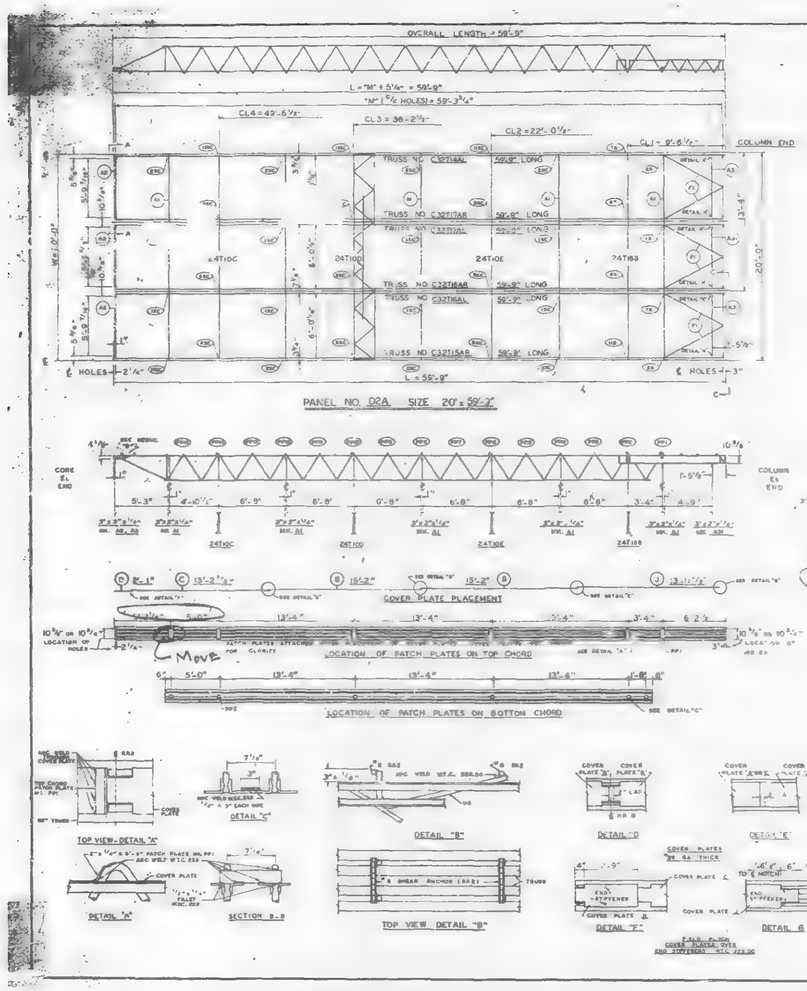
SHOP: MELT CONTINUOUS CASTING 3/4/69 SK

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46-49(EAST), 79-83(WEST)

PANEL MR1 - 13'-4" x 35'-8"

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7-AB3-23 PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY	DATE 1-29-69
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY	DATE 1-29-69
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C.	221 SHEET NO. FP-MR1



REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T1AL	1	C32"16AL x 59'-9"	ST 2.14AL
	T1AR	1	C32" 5AR x 59'-9"	ST 2.15AL
	T2AL	1	C32"[illegible]	ST 2.16AL
	T2AR	1	C32"[illegible]	ST 2.17A
	T2CR	1	C32"[illegible]	ST 2.17B
BRIDGING TRUSSES	T0C	1	24TI0C x 8'-11"	ST 2.10C
	T0D	1	24TI0D x 12'-11"	ST 2.20
	T0E	1	24TI0E x 18'-11"	ST 2.10E
	T6B	1	24TI6B x 18'-11"	ST 2.18B
3"x 2"x 1/4" ANGLE	A1	3	3"x2"x1/4"x 18'-11"	ST 403
	A2	2	3"x2"x1/4"x 5'-11"	ST 403
	A3	1	3"x2"x1/4"x 5'-3"	ST 403
	A3H	3	3"x2"x1/4"x 15'-8 7/16"	ST 410
CLOSURE PLATES	PL1	2	1/2" x 12" x 2'-10 1/2"	ST 4
DIAGONAL FLATS	FL	6	11 1/2" x 5/16" x 4'-8"	ST 402
PATCH PLATES	PP1	8	2'-1" x 1'-0" x 0'-3"	ST 403
	PP2	16	3'-1" x 1'-0" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 5'-7"	ST 303
	C	3	9" x .0135" x 12'-1"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	3	8" x .0135" x 13'-11"	ST 304
ANGLE CLIPS	CI	24	2" x 1" x 3 1/2" x 8"	ST 400
3/4"ø SHEAR ANCHOR	SA2	6	3/4" ø REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	1	1" x 6 1/2" x 3"	ST 400
	CB4	3	8" x 5/16" x 10"	ST 400
	TOTAL		179 1/2 LBS	
CONNECTION PLATES	P1	2	3/4" x 3" x 6" x 0'-6 1/2"	ST 400
	P2	1	6" x 1/2" x 6'-9"	ST 400
	P4	3	6" x 1" x 1'-3" x 1'-6"	ST 400
	P8	1	4" x 1" x 3'-3" x 0'-6"	ST 40
	P9	8	3" x 1" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS IN "CD".
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

NO	DATE	REVISION	BY

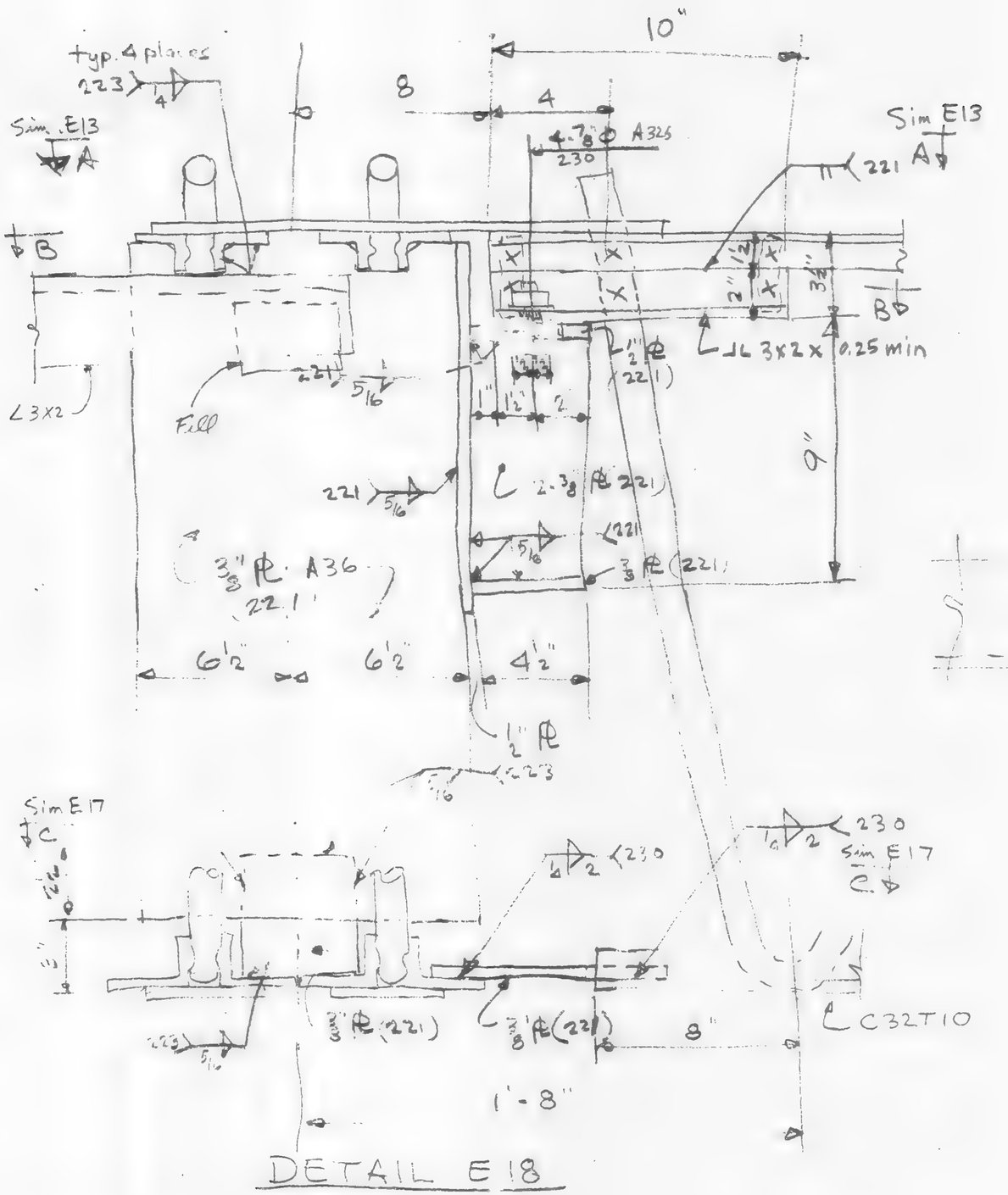
REF. DRWG.

7-683-30	10-4-68
7-684-28	7-22-68
7-69--3	0-4-68
7-691-4, 5 & 14	10-4-68
7-682-13	10-4-68
7-682-17	10-4-68
36-124	10-4-68

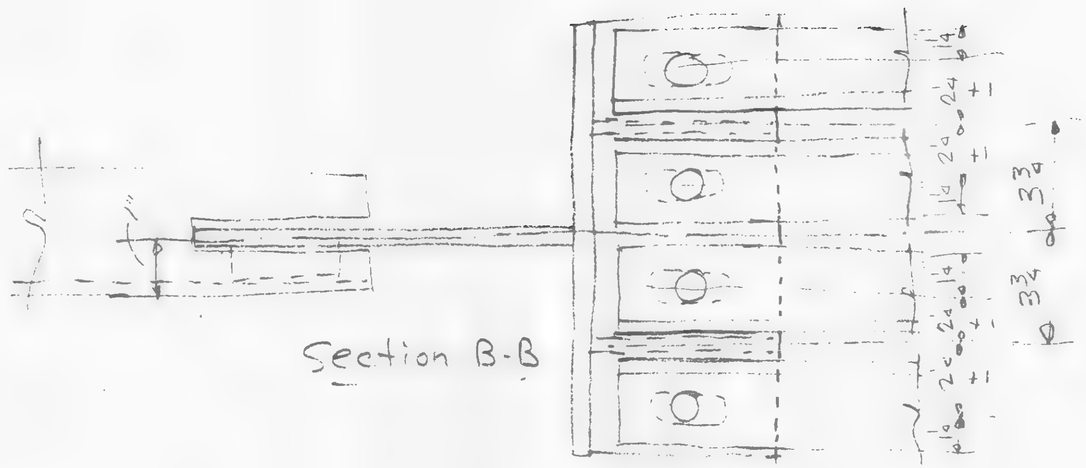
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL D2A - 20'x 59'-9"

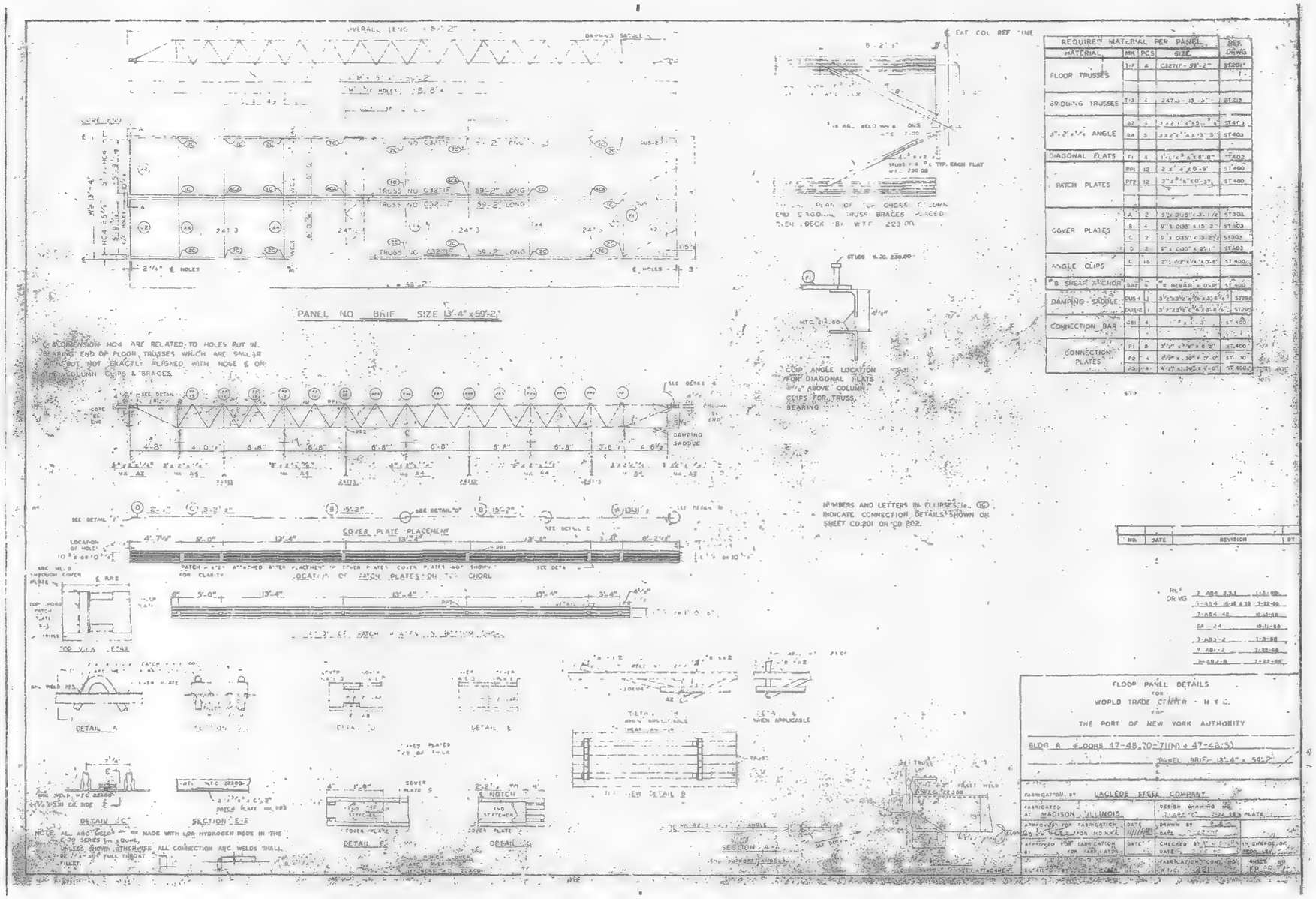
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED ON FABRICATION BY FOR PORT OF N.Y.A.
APPROVED FOR FABRICATION BY FOR PORT OF N.Y.A.
DESIGN DRAWING NO 7-683-30
DRAWN BY JWK DATE DEC. 5, 1968
CHECKED BY J.N. COUNSIL DATE DEC. 5, 1968
FABRICATION CONT NO WTC 22
PLATE
IN CHARGE OF PROJ. C. J.
SHEET NO FD D2A


typ. 4 places
223
Sim E13
A
B
10"
8
4
4-7/8 ⌀ A325
230
Sim E13
221
A
B
L 3x2x 0.25 min
L3x2
Fill
221
5/16
1/2 ⌀ (221)
2
9"
221
5/16
L 2-3/8 (⌀ 221)
5/16
(221)
3/8 ⌀ (221)
3/8" ⌀ A36
(221)
6'-2"
6'-2"
4'-2"
1/2" ⌀
(223)
5/16
Sim E17
C
230
1/4
2
230
Sim E17
C
3/8" ⌀ (221)
3/8" ⌀ (221)
8"
C32T10
1'-8"

DETAIL E18


Section B-B

WTC1-131-LERA



REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T-F	4	C327TF - 59'-2"	ST201*
BRIDGING TRUSSES	T-B	4	247.0 - 13'-3"	ST213
3" x 2" x 5/16" ANGLE	A2	4	3 x 2 x 5/16 x 4'-5"	ST401
	A4	3	3 x 2 x 5/16 x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1'-1 1/2" x 8 x 8'-8"	ST402
PATCH PLATES	PP1	12	2 x 4" x 0'-9"	ST400
	PP2	12	3" x 8" x 5'-3"	ST400
COVER PLATES	A	2	5/16 x 0'-5 1/2" x 3'-1 1/2"	ST303
	B	4	5/16 x 0'-3 1/2" x 15'-2"	ST303
	C	2	5/16 x 0'-3 1/2" x 13'-2 1/2"	ST303
	D	2	5/16 x 0'-3 1/2" x 2'-1"	ST303
ANGLE CLIPS	C	16	2" x 2" x 5/16 x 0'-8"	ST400
3/4ø SHEAR ANCHOR	SAF	6	3/4ø REBAR x 0'-5"	ST400
DAMPING SADDLE	DUS-1	1	3/16 x 3/16 x 3'-6 3/4" x 31 3/4"	ST298
	DUS-2	1	3/16 x 3/16 x 3'-6 3/4" x 31 3/4"	ST298
CONNECTION BAR	CB1	4	1" x 1" x [illegible]	ST400
CONNECTION PLATES	P1	8	3/16" x 3/16" x 6"	ST400
	P2	4	1/2" x 30" x 1'-0"	ST 30
	P3	4	1/2" x 30" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG

7 AB4 3.3.1	1-8-68
1-334 15-16 & 38	7-22-68
7-AB4-48	10-12-68
SA 24	10-11-68
7-AB3-2	1-3-68
7 AB1-2	7-22-68
7-AB2-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A E.0085 47-48.70-71(N) & 47-48(S)

PANEL BRIF 13'-4" x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB2 SHEET 7-24 SERIES PLATE

APPROVED FOR FABRICATION BY [illegible] FOR PANYNJ

DATE 11/18/68

DRAWN BY [illegible] DATE 7-22-68

APPROVED FOR FABRICATION BY [illegible] FOR PANYNJ

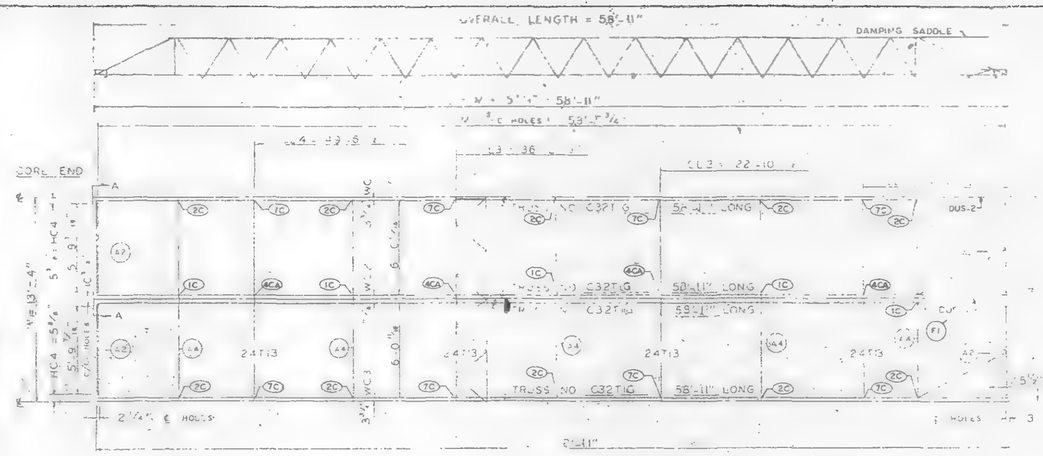
DATE [illegible]

CHECKED BY [illegible] DATE 7-22-68

IN CHARGE OF DESIGN [illegible]

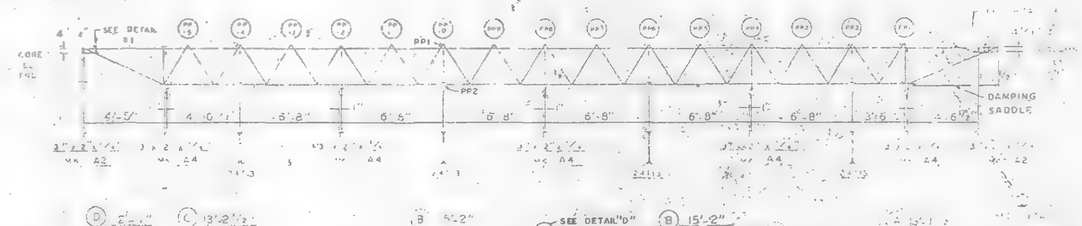
FABRICATION CONT. NO. W.T.C. 221

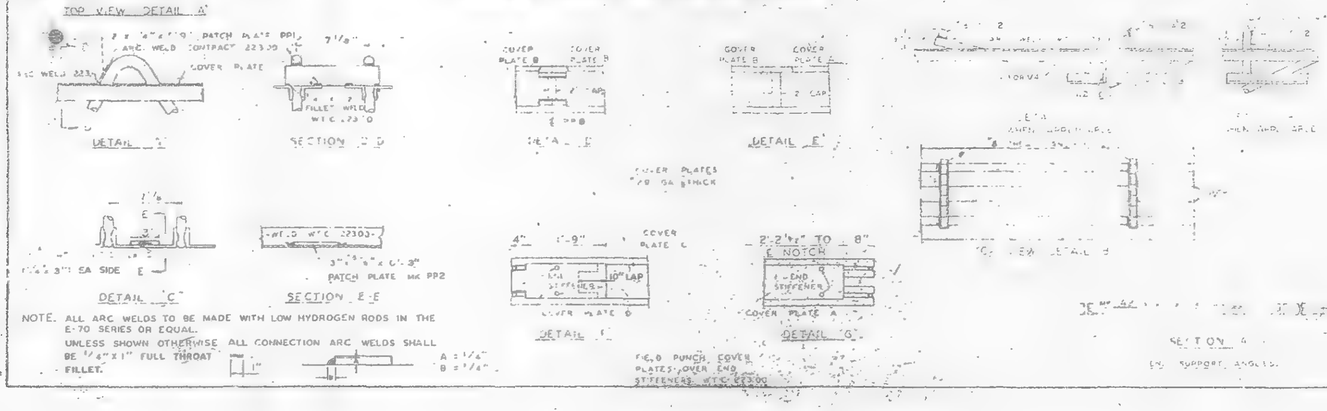
SHEET NO. FD 201



PANEL NO. A BRIG SIZE 3'-4" x 58'-11"

ø & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ø ON THE COLUMN CLIPS & BRACES

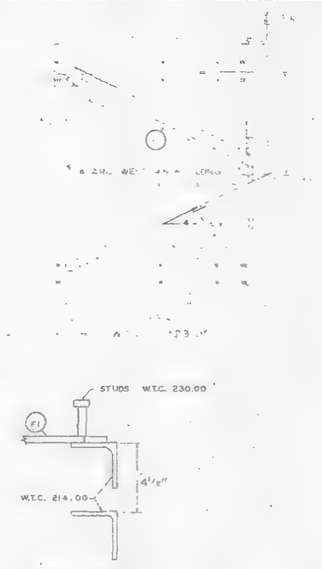




NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 3/16"

END PUNCH COVER PLATES, COVER END STIFFENERS WT'G 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/16" ABOVE COLUMN CLIPS FOR TRUSS BEARING

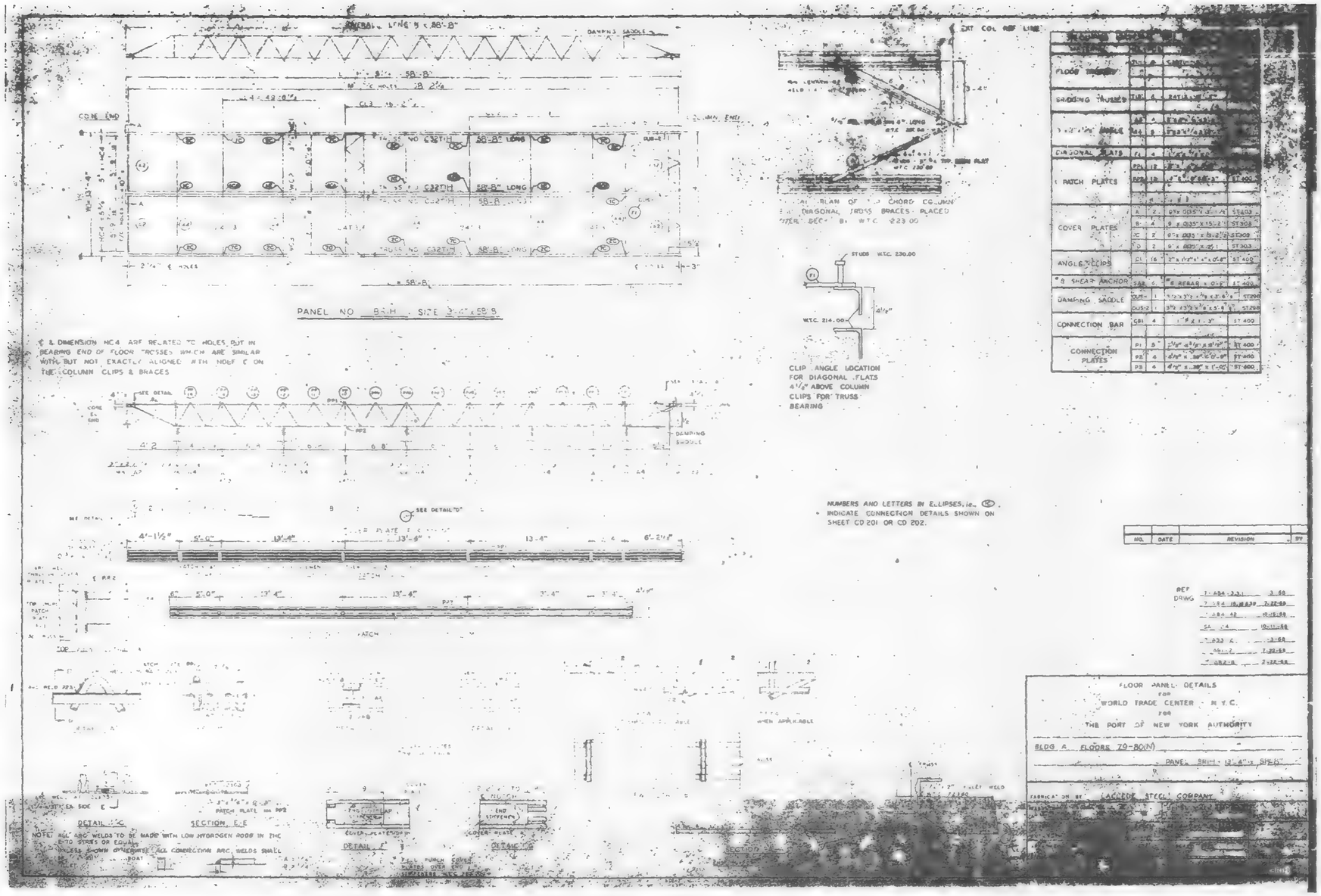
MARK	NO.	SIZE	REF. DRWG
		L32T1G 58'-11"	ST 201G
			ST 213
			ST 303
			ST 403
			ST 402
FM	12		ST 400
FATCH PLATES PP2	12		ST 400
			ST 303
	2		ST 303
	2		ST 303
	16	2" x 1'-2" x 1'-2" x 0'-6"	ST 400
	6	ø REBAR	ST 400
			ST 298
			ST 298
BAR			ST 400
CONNECTION PLATES P1	5	3/8" x 3'-8" x 8'-2"	ST 400
P2	4	4 1/2" x 39" x 0'-9"	ST 400
P3	4	4 1/2" x 39" x 1'-0"	ST 400

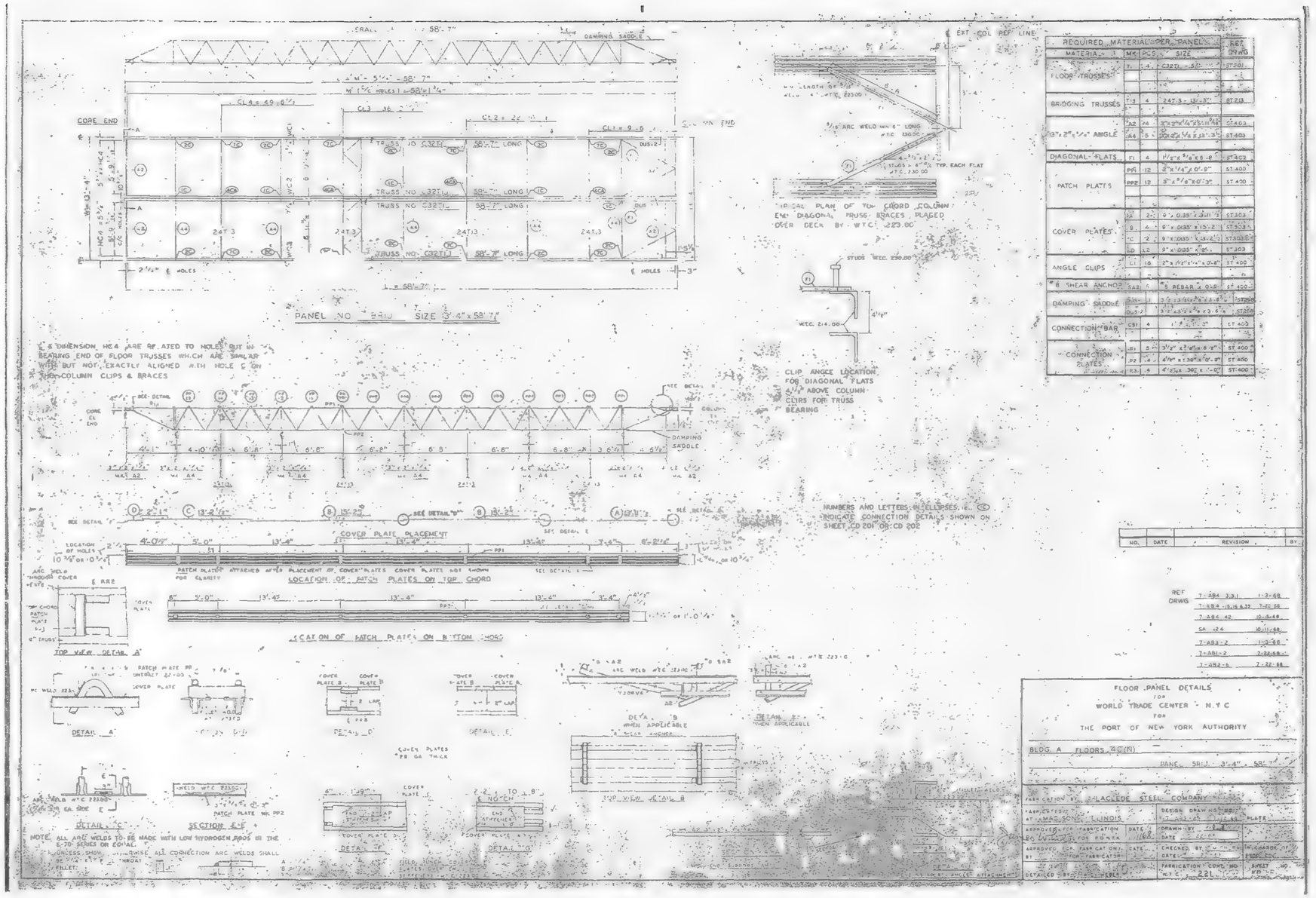
NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY
7	7-15-68	GENERAL	MC

MARK	NO.	SIZE	DATE
		L32T1G 58'-11"	3-68
			5-8-68
			4-1-68
			1-20 68
			3-68
			2-5-68
			2-15-68

DESIGN		DESIGN DRAWING NO	
DETAILING		7 7 6 4 1-68	PLATE
CHECKED BY FABRICATION	DATE	DRAWN BY	
APPROVED BY SHOP FABRICATOR	DATE	DATE	
APPROVED BY ERECTION	DATE	CHECKED BY	IN CHARGE OF
APPROVED BY FIELD FABRICATOR	DATE	DATE FEB 24, 1956	PROD. DEV.
		FABRICATION CONT NO	SHEET NO
		WT 221	FP BRIG


PANEL NO B-1-H SIZE 3'-4" x 59'-8"
DAMPING SADDLE
CORE END
EXT COL REF LINE
STUDS WTC. 230.00
WTC. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING
SEE DETAIL "D"
PATCH PLATE
DETAIL "C"
SECTION E-E
DETAIL "F"
DETAIL "G"
NUMBERS AND LETTERS IN ELLIPSES, ie. (B1). INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.
NO. DATE REVISION BY
REF DRWG
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG A FLOORS 79-80(M)
PANEL BRIDGE 13'-4" x 59'-8"
FABRICATION BY LACLEDE STEEL COMPANY



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T	4	C32TJ - 58'-7"	ST 201
BRIDGING TRUSSES	T13	4	24T3 - 13'-3"	ST 213
13"x2"x1/4" ANGLE	A2	24	3"x2"x1/4"x3'-11 1/2"	ST 403
	A4	15	3"x2"x1/4"x13'-3"	ST 403
DIAGONAL FLATS	F1	4	1'-9"x5"x5/8"x5'-8"	ST 402
PATCH PLATES	PP1	12	2'-8"x1'-4"x0'-0.75"	ST 400
	PP2	12	3'-4"x8"x0'-0.75"	ST 400
COVER PLATES	A	2	9"x0.135"x3'-11 1/2"	ST 303
	B	4	9"x0.135"x15'-2"	ST 303
	C	2	9"x0.135"x13'-2"	ST 303
	D	12	9"x0.135"x2'-0"	ST 303
ANGLE CLIPS	CL	16	2"x5"x1/4"x0'-6"	ST 400
3/4" ø SHEAR ANCHOR	SA2	6	6 REBAR x 0'-5"	ST 400
DAMPING SADDLE	DS	1	3/4"x3'6"x8"x3'-6"	ST 206
	DS-2	1	3/4"x3'6"x8"x3'-6"	ST 206
CONNECTION BAR	CB1	4	1"x5"x1'-2"	ST 400
CONNECTION PLATES	CP1	5	5/16"x2'-6"x0'-6 1/8"	ST 400
	CP2	4	5/16"x3'-0"x0'-8"	ST 400
	PB3	4	4"x5"x.392"x1'-0"	ST 400

NO.	DATE	REVISION	BY

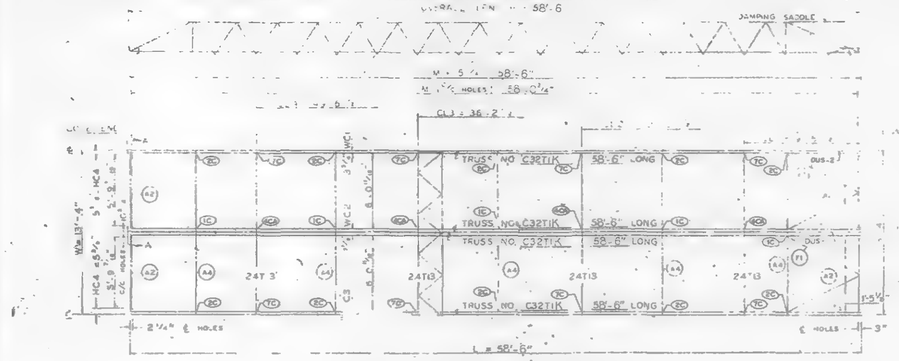
REF DRWG		
7-SB4 3.3.1	1-3-68	
7-SB4-1&1A 6.39	7-25-68	
7-SB4 42	10-8-68	
SA 124	10-11-68	
7-AB2-2	1-3-68	
7-AB1-2	7-22-68	
7-AB2-5	7-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 7 C (N)

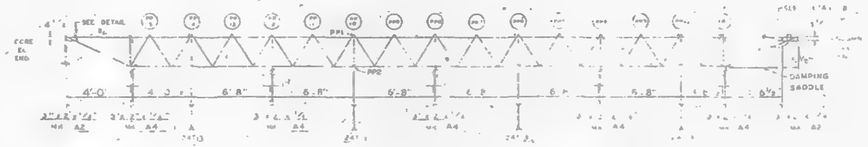
PANEL 5RTJ 3'-4" x 58'-7"

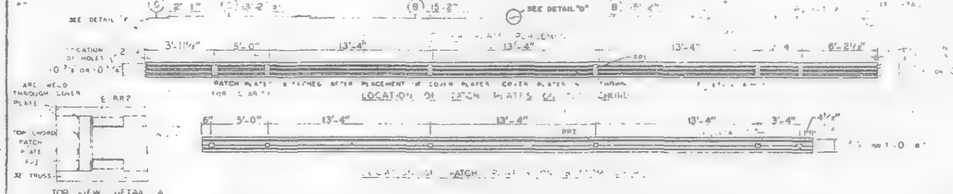
FABRICATED BY: INLAND STEEL COMPANY
AT: JOLIET, ILLINOIS
APPROVED FOR FABRICATION BY: [illegible] FOR POWER
APPROVED FOR FABRICATION BY: [illegible]
DETAILED BY: [illegible]
DESIGN DRAW NO: 7-AB2-5
DATE: 7-22-68
DRAWN BY: [illegible]
DATE: 7-22-68
CHECKED BY: [illegible]
DATE: 7-22-68
FABRICATION CONT. NO: N.Y.C. 221
PLATE
INCHARGE OF PROJ. ENG.
SHEET NO.



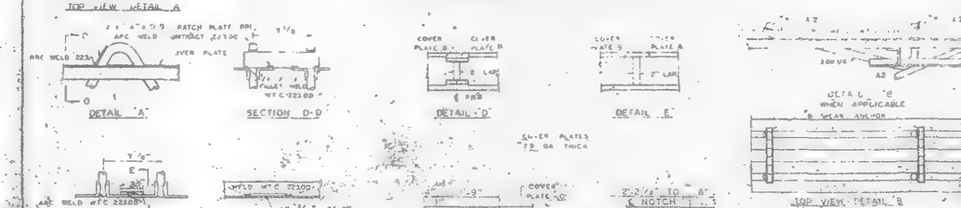
PANEL NO. 9B1K SIZE 13'-4" x 58'-6"

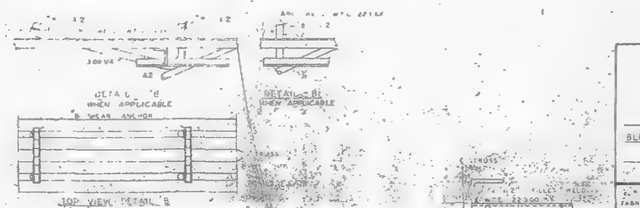
℄ & DIMENSION WC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SKEWED WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

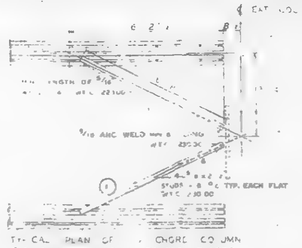




TOP VIEW DETAIL A







REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	4	32T1K- 58'-6"	ST201
BRIDGING TRUSSES	T3	4	24T13 13'-3"	ST218
3 x 2 x 1/4 ANGLE	A2	4	3" x 2" x 1/4" x (5'-11 3/8")	ST403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1" x 5/8" x 8'-8"	ST402
PATCH PLATES	PP1	12	2 x 1/4" x 0'-9"	ST 400
	PP2	12	2 x 3/8" x 0'-3"	ST 400
COVER PLATES	A	2	8" x .0135" x 13'-11 1/2"	ST303
	B	4	8" x .0135" x 16'-2"	ST303
	C	2	8" x .0135" x (8'-2 1/2")	ST303
	D	2	9" x .0135" x 5'-1"	ST303
ANGLE CLIPS	C1	16	2" x 2" x 1/4" x 0'-8"	ST 400
7/8 SHEAR ANCHOR	SAB	6	BAREBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1" x 1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 7/8" x 6 1/4"	ST 400
	P2	4	4 1/2" x .390" x 10'-8"	ST 400
	P3	4	4" x .390" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

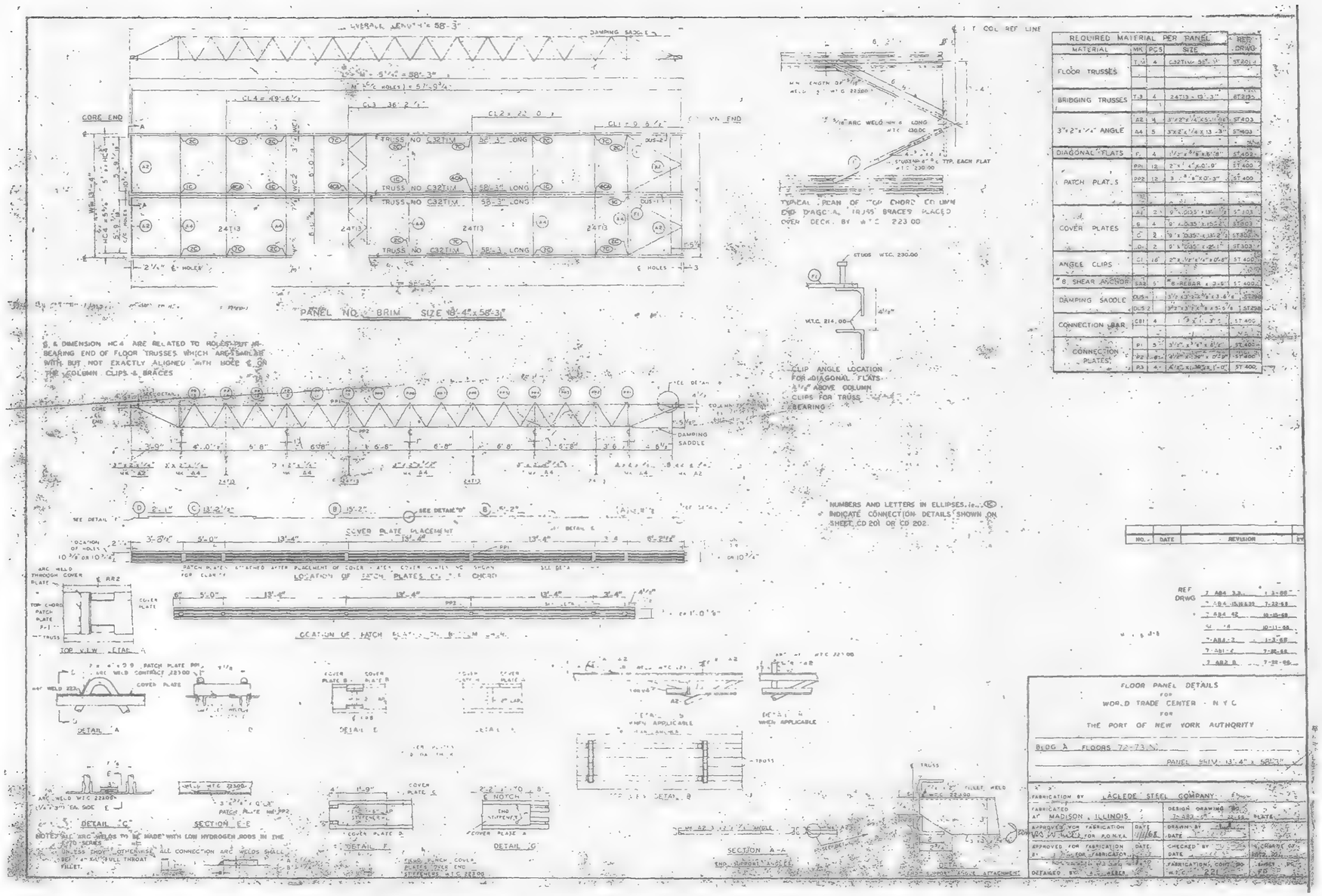
REF DRWG
7 A84 3.21 1-3-68
7 A84 15.18 & 20 7.22.68
7 A84 42 10-10-68
GA 24 10-11-68
7 A84 2 1-3-68
7 SB1.2 7.22.68
7 A84-11 7.22.68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 46 (N) + 45 46 (S)

PANEL 9B1K - 13'-4" x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 A83 - 7.22.68 PLATE
APPROVED FOR FABRICATION DATE 11/1/68 DRAWN BY
APPROVED FOR FABRICATION BY FOR PONYA DATE
APPROVED FOR FABRICATION BY FOR WORK FABRICATOR DATE CHECKED BY DATE
DETAILED BY A.C. WEBER
FABRICATION CONTRACT NO. W.T.C. 221 SHEET NO. FD-B



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	T1	4	C32T1M - 58'-3"	ST 201.4
BRIDGING TRUSSES	T3	4	24T13 - 13'-3"	ST 201.3
3"x2"x¼" ANGLE	A2	4	3"x2"x¼" x 5'-11 7/8"	ST 403
	A4	5	3"x2"x¼" x 13'-3"	ST 403
DIAGONAL FLATS	F1	4	1½"x 6"-8" x 8'-7"	ST 402
PATCH PLATES	PP1	12	2"x ¼" x 4'-0" 9"	ST 400
	PP2	12	3" x ⅝"x 0'-3"	ST 400
COVER PLATES	A1	2	9" x .0135" x 13'-4"	ST 303
	B	4	6" x .0135" x 13'-2"	ST 303
	C	2	9" x .0135" x 13'-2"	ST 303
	D	2	9" x .0135" x 4'-2"	ST 303
ANGLE CLIPS	C1	16	2"x 1½"x ¼" x 0'-8"	ST 400
⌀ 8 SHEAR ANCHOR	SA8	5	8" REBAR x 3'-5"	ST 400
DAMPING SADDLE	DUS-1	1	3½"x 3½"x 6"x 3'-6"	ST 298
	DUS-2	1	3½"x 3½"x 6"x 3'-5⅞"	ST 298
CONNECTION BAR	CB1	4	⅜" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3½"x 3"x 6"x 6½"	ST 400
	P2	4	4½"x 3½"x 0'-2"	ST 400
	P3	4	4½"x 3½"x 1'-0"	ST 400

NO.	DATE	REVISION	BY

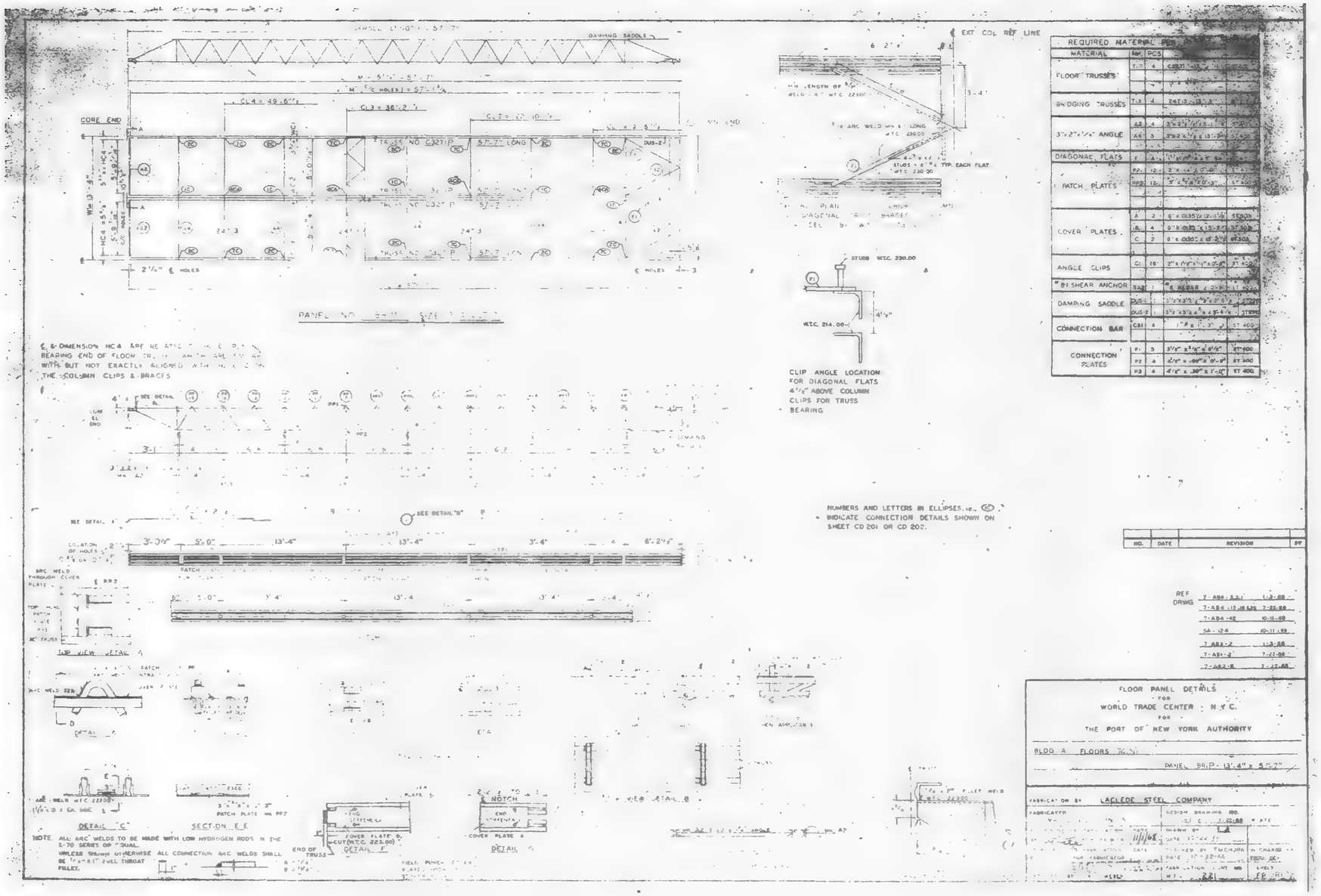
REF DRWG		
T ABA 33	1-3-68	
T ABA 15 16 & 22	7-22-68	
T ABA 42	10-15-68	
" "	10-11-68	
T ABA 2	1-3-68	
T AB1-C	7-22-68	
T AB2 B	7-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 72-73 N.

PANEL 4&1V. 13'-4" x 58'-3"

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	T-AB2-5 SH 22,23 PLATE
APPROVED FOR FABRICATION	DATE 11/11/68	DRAWN BY	
APPROVED FOR FABRICATION	DATE	CHECKED BY	
APPROVED FOR FABRICATION	DATE	FABRICATIONS, CONT. NO.	SHEET NO.
DETAILED BY		W.O. # 221	



REQUIRED MATERIAL			
MATERIAL	MK	PCS	
FLOOR TRUSSES	T1	4	C32T1 - 57'-7"
	T2	2	C32T2 - 57'-7"
BRIDGING TRUSSES	T3	4	24T13 - 13'-3"
	T4	2	24T13 - 13'-3"
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" x 6'-0"
	A4	3	3"x2"x1/4" x 13'-3"
DIAGONAL FLATS	F	4	1/4" x 6" x 8'-8"
PATCH PLATES	PP1	12	3/8" x 4" x 2'-0"
	PP2	12	3/8" x 4" x 2'-3"
COVER PLATES	A	2	8" x 0.135"ϕ x 13'-1 1/2" ST 52.0
	B	4	8" x 0.135" x 13'-8" ST 52.0
	C	2	8" x 0.135" x 6'-2 1/2" ST 52.0
ANGLE CLIPS	CL	16	2" x 1 1/2" x 1/4" x 0'-6" ST 42.0
7/8" ϕ SHEAR ANCHOR	SAR		7/8" ϕ REAR ST 60.0
DAMPING SADDLE	DUS-1	1	3"x3"x3/8" x 6'-8" ST 37.0
	DUS-2	1	3"x3"x3/8" x 5'-8" STEEL
CONNECTION BAR	CB1	4	1" x 3" ST 40.0
CONNECTION PLATES	P1	3	3/4" x 3 1/2" x 0'-6" ST 40.0
	P2	4	3/4" x 4" x 0'-8" ST 40.0
	P3	4	3/4" x 4" x 1'-0" ST 40.0

NO.	DATE	REVISION	BY

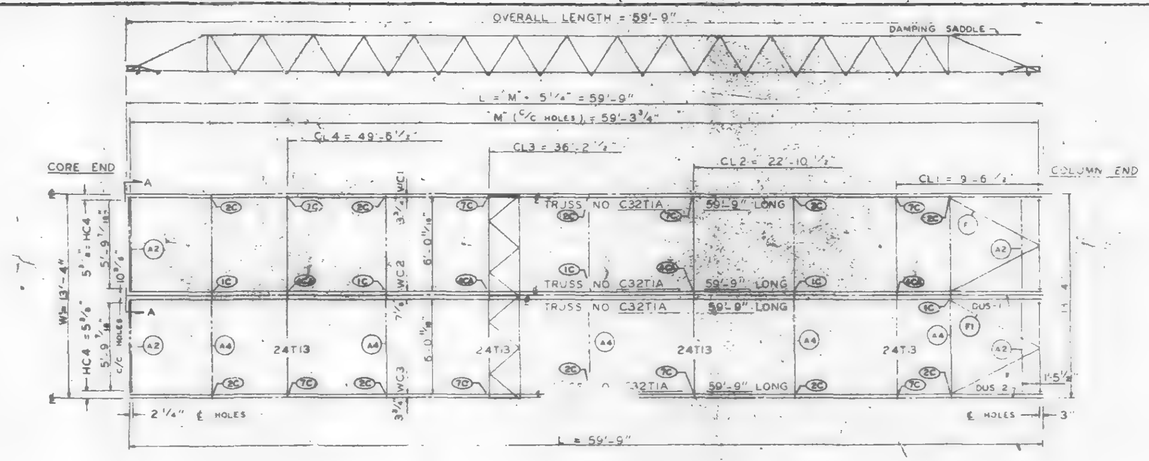
REF DRWG

7-AB4-3.3A1	1-3-68
7-AB4-13,10&3A	7-22-68
7-AB4-4E	10-16-68
SA-124	10-11-68
7-AB3-2	1-3-68
7-AB1-2	7-22-68
7-AB2-B	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR -
THE PORT OF NEW YORK AUTHORITY

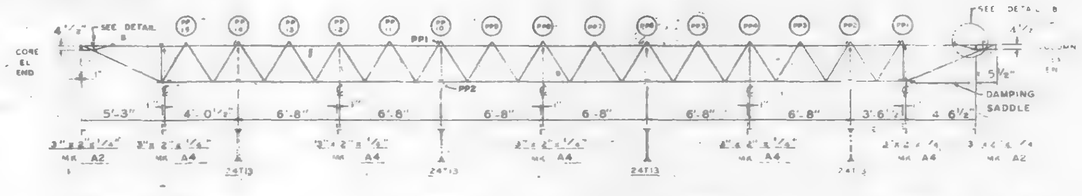
BLDG A FLOORS 7(N)
PANEL SHIP. 13'-4" x 5'-7"

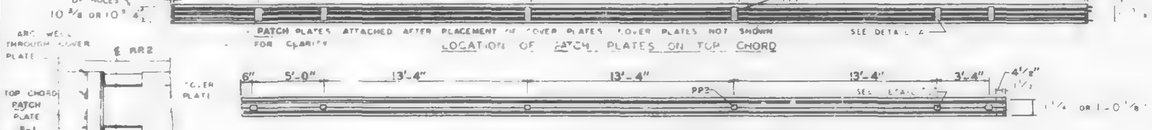
FABRICATION BY LACLEDE STEEL COMPANY

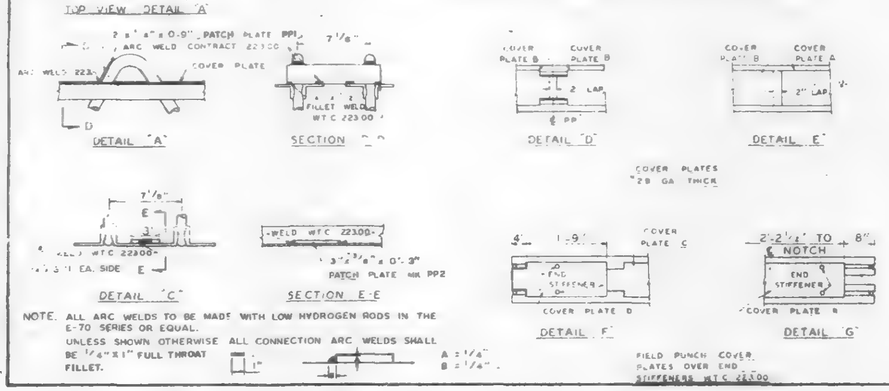


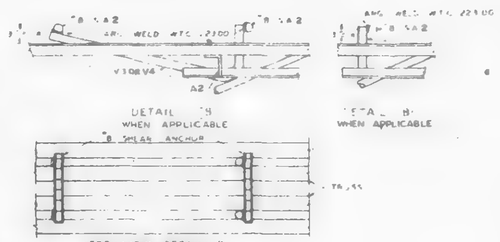
PANEL NO. B1A · SIZE 13'-4" x 59'-9"

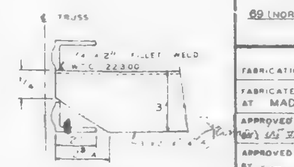
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

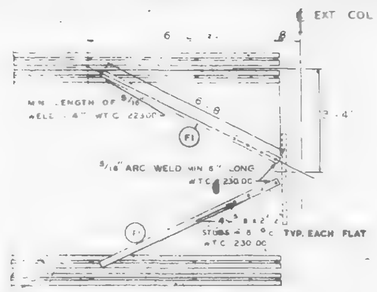


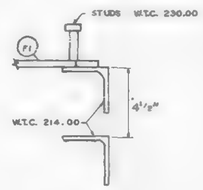












CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS	SIZE	DRWG
FLOOR TRUSSES	T1A	4	C32T1A - 59'-9"	ST201A
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST213
3"x2"x5/16" ANGLE	A2	4	3"x2"x1/4"x5'-11 9/16"	ST403
	A4	5	3"x2"x1/4 x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1'-2"x 5/8"x 6'-8"	ST402
℄ PATCH PLATES	PP1	12	2"x 1'-4"x 0'-9"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	2	9"x 0.35"x 3'-1 1/2"	ST303
	B	4	9"x 0.135 x 15'-2	ST303
	C	2	9"x 0.035"x 13'-2 1/2"	ST303
	D	2	9"x 0.035" x 2'-1	ST303
ANGLE CLIPS	C1	15	2"x 1'-2"x1/4"x 0'-8"	ST 400
⌀ 8 SHEAR ANCHOR	SA2	8	⌀ 8 REBAR x 0'-9	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8 x 3'-8 7/8	ST298
CONNECTION BAR	CB1	4	1 ⌀ x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3/8" x 3'-6" x 6 1/2"	ST 400
	P2	4	6 1/8" x .38" x 0'-9"	ST 400
	P3	4	4 1/8" x .38" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

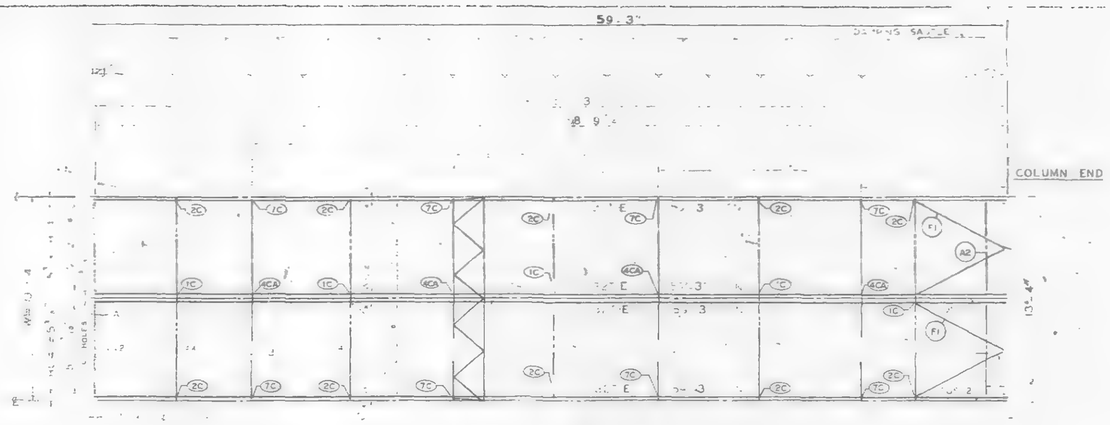
NO.	DATE	REVISION	BY
4	7-15-68	GENERAL	TMC

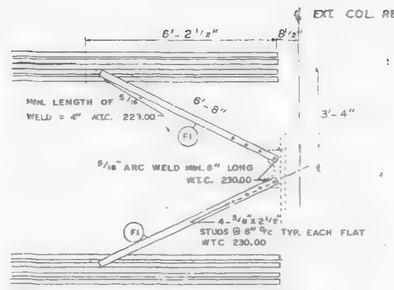
REF DRWG
7-AB4-3,3.1&3B 1-4-68
-SB4-15&16 5-6-68
-SB4-42 6-1-68
-SA-24 10-20-67
7-AB3-2 1-3-68
7-AB1-2 2-5-68
7-AB2-8 2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

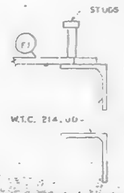
BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68
69 (NORTH) PANEL B1A - 13'-4" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-5 4-1-68 PLATE
APPROVED FOR FABRICATION BY [redacted] FOR P.O.N.Y.A. DATE 8/6/68
DRAWN BY [redacted] DATE FEB. 24, 1968
APPROVED FOR FABRICATION BY [redacted] FOR FABRICATOR DATE
CHECKED BY J.B.PAUL DATE FEB. 24, 1968
IN CHARGE OF PROD. REV.
DETAILED BY A.E.WEBER
FABRICATION CONT NO WTC 221
SHEET NO FP B1A



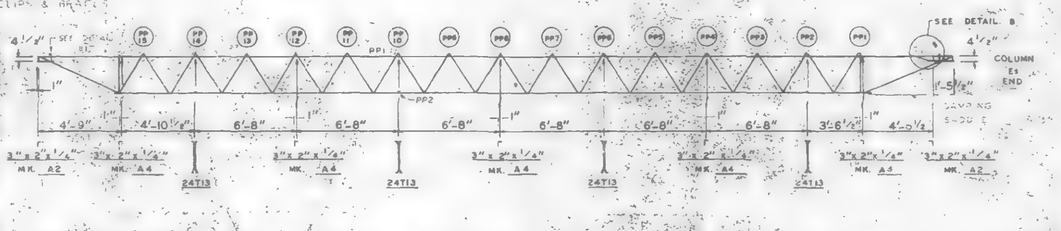


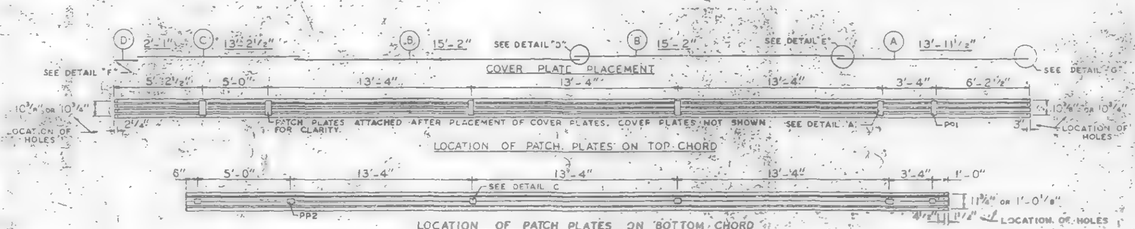
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

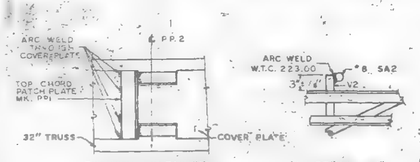


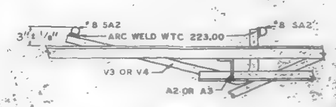
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

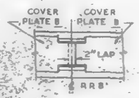
PATCH PLATES	PP1	12	3"	ST 400
	PP2	12	3"	ST 400
COVER PLATES				
	18	2" x 1 1/2" x 1'-6"		ST 400
	2	8		ST 400
	CS1	4	3"	ST 400
CONNECTION PLATES	P1	5	7 1/2" x 3/8" x 6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

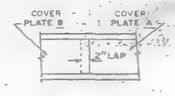


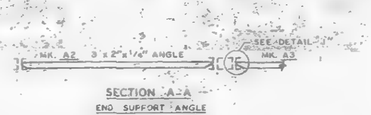


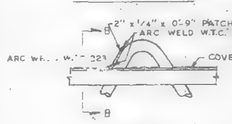


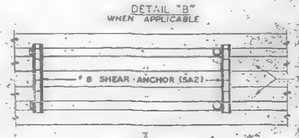


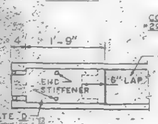


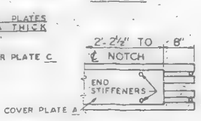




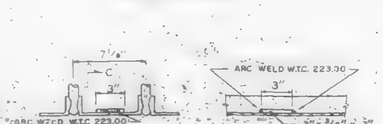








FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

NUMBERS AND LETTERS IN ELLIPSES, i.e., (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY
7	5-15-68	GENERAL	TMC

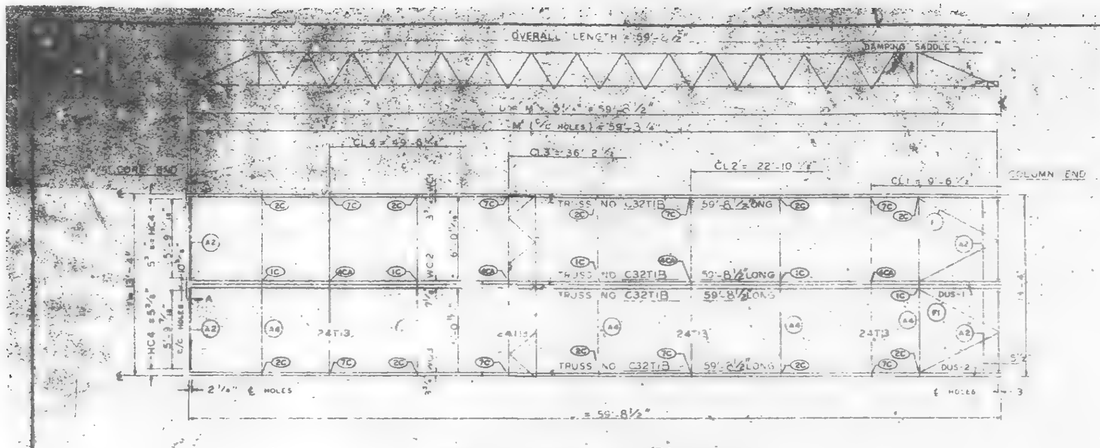
BLDG. 4 FLOORS 10-11 (NORTH & SOUTH)

ALLEGH STEEL COMPANY

DRAWING NO.

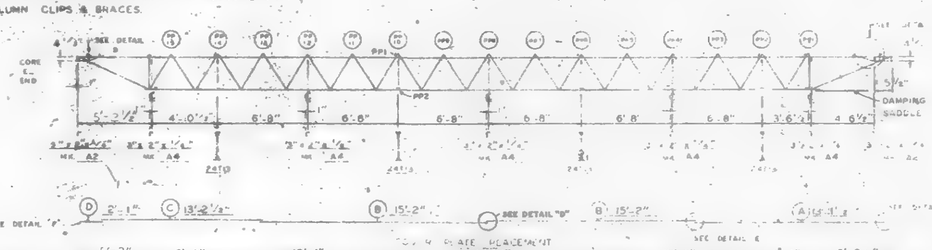
SCALE: FEB 24, 1968 DRN: VLY

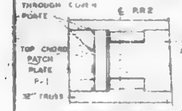
JACOBS STEEL CO.



PANEL NO. B1B SIZE 13'-4" x 59'-8 1/2"

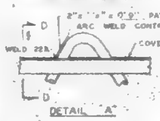
℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



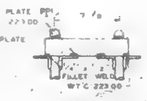


TOP VIEW DETAIL A

LOCATION OF PATCH PLATES ON BOTTOM CHORD



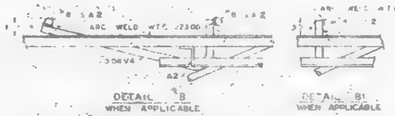
DETAIL "A"



SECTION D-D

DETAIL "D"

DETAIL "E"

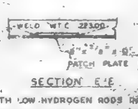


DETAIL "B" WHEN APPLICABLE

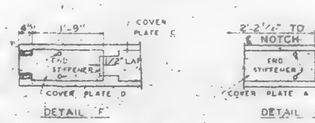
DETAIL "B1" WHEN APPLICABLE

TOP VIEW DETAIL B

DETAIL "C"



SECTION E-E



DETAIL "F"

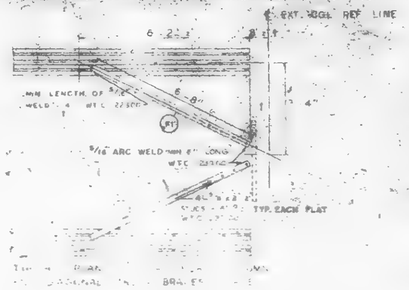
DETAIL "G"

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS WT.C 22300

SECTION A-A
END BUPPORT ANGLES

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1B	4	C32T1B - 59'-8 1/2"	ST 201
BRIDGING TRUSSES	T1B	4	24T 3 - 53" LG	ST 210
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 1/4"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
DIAGONAL FLATS	F1	4	2" x 6" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 8" x 0'-9"	ST 400
	PP2	12	3" x 8" x 0'-3"	ST 400
				ST 303
				ST 303
				ST 303
				ST 303
				ST 400
	SA2	8		ST 400
				ST 298
				ST 298
CONNECTION BAR	CB1	4		ST 400
CONNECTION PLATES	P1	8	3 1/4" x 8 1/16" x 8 1/16"	ST 400
	P2	4	4'-7" x .30" x 0'-9"	ST 400
	P3	4	4'-6" x .30" x 1'-0"	ST 400

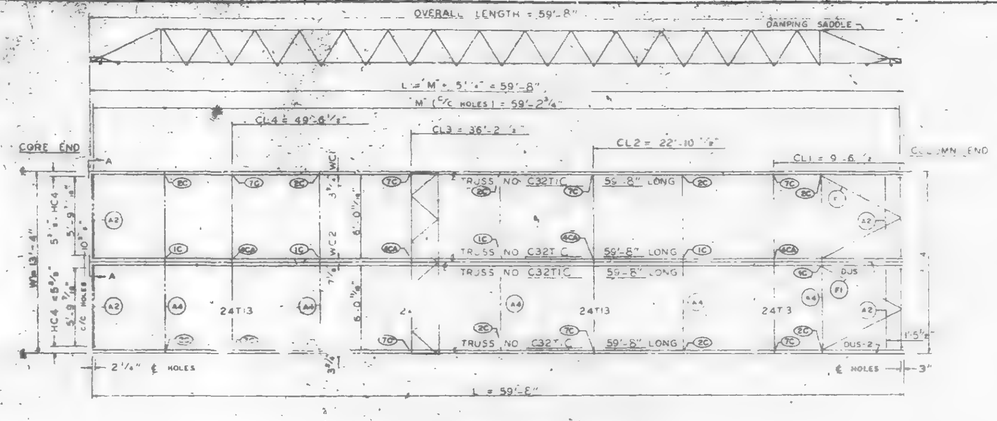
NO	DATE	REVISION	BY

FLOOR PANEL DETAILS
FOR
W.T.C. TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

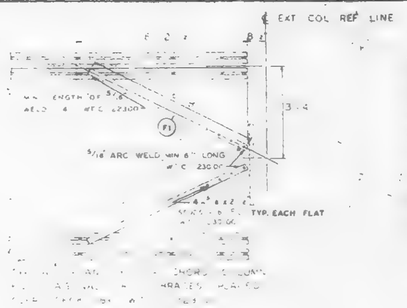
BLDG. A FLOORS 83-91, 93-106 (N)
WAFF. 5-3, 4 + 5-4, 5

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO 7-881-5 & 1-88 PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 10/23/67
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE
DETAILED BY A.N.C.	CHECKED BY T.W. DATE 2-1968
	FABRICATION CONT. NO. W.T.C. 221
	DRAWN BY DATE 1968
	SHEET NO CD B1

ALLEGHENY STEEL COMPANY



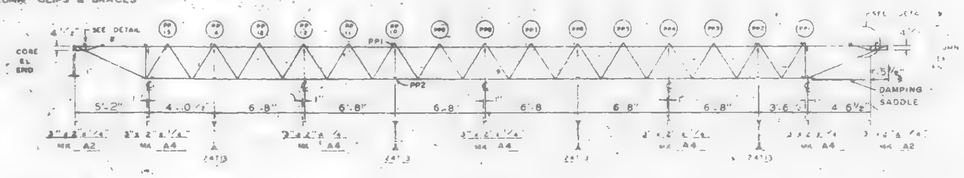
PANEL NO. B1C SIZE 13'-4" x 59'-8"

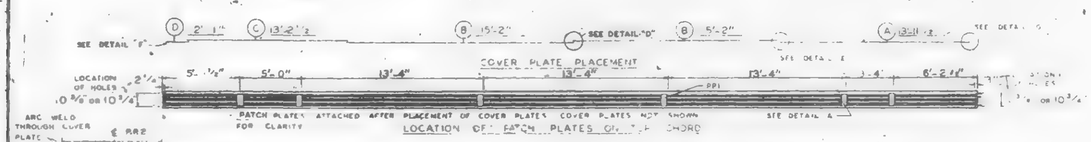


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

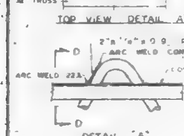
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	SEE DRWG.
FLOOR TRUSSES	T1C	4	C32T1C - 59'-8"	ST201C
BRIDGING TRUSSES	T-3	4	24T-3 - 13'-3"	BT213
3 x 2 1/2 x 1/4 ANGLE	A2	4	3"x2"x1/4"x5'-11 15/16"	ST403
	A4	5	3"x2"x1/4"x13'-3"	ST403
DIAGONAL FLATS	F1	4	1 1/2"x4 5/8"x6'-8"	ST402
PATCH PLATES	PP1	12	2" x 4" x 0'-9"	ST 400
	PP2	12	3/4" x 8" x 0'-2"	ST 400
COVER PLATES	A	2	8"x.0135"x13'-11 1/2"	ST303
	B	4	8"x.0135"x15'-2"	ST303
	C	2	9"x.0135"x13'-2 1/2"	ST303
	D	2	9"x.0135"x2'-1"	ST303
ANGLE CLIPS	C1	16	2"x1 1/4"x1 1/4"x0'-8"	ST 400
7/8 SHEAR ANCHOR	SA2	8	7/8" ℄ REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	1	3"x3 1/2"x3/8"x3 6 7/8"	ST298
	DUS-2	1	3"x3"x3/8"x3 0 8	ST298
CONNECTION BAR	CB1	4	1"x1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 9 5/8" x 8 1/4"	ST 400
	P2	4	11/16" x .38" x 1'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



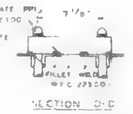


NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

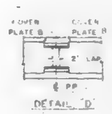


TOP VIEW DETAIL A

DETAIL "A"

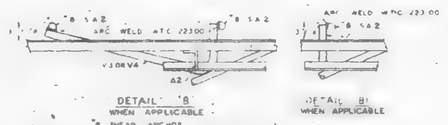


SECTION D-D

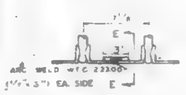


DETAIL "D"

DETAIL "E"



TOP VIEW DETAIL B



DETAIL "C"

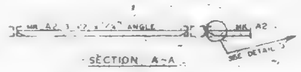
SECTION E-E

DETAIL "F"

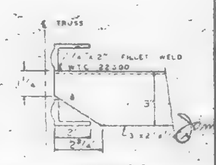
DETAIL "G"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x 1" FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

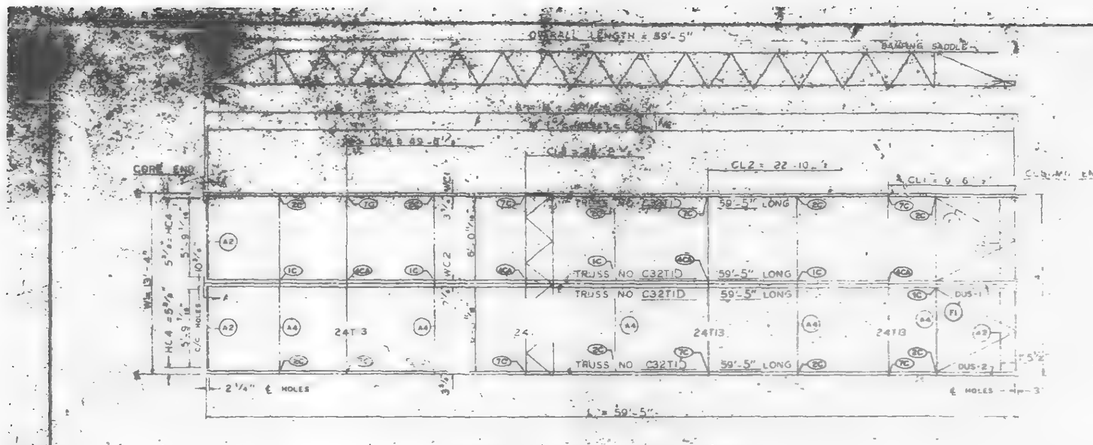
NO.	DATE	REVISION	BY

REF DRWG		
1	AB4	2,3,1&3D 2 68
2	AB4	5&16 5-6-68
3	AB4	42 4 - 68
4		
5	AB3	2 3 68
6	AB1	2 2 68
7	382	8 5 15 68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

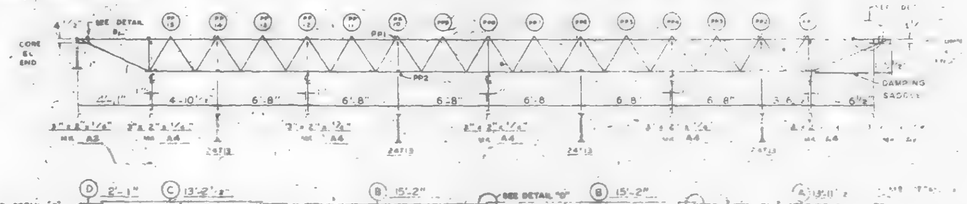
BLDG. A FLOORS 49-58,60-66,69-74,79 91 [illegible]
PANEL B1C - 13'-4" x 59'-8"

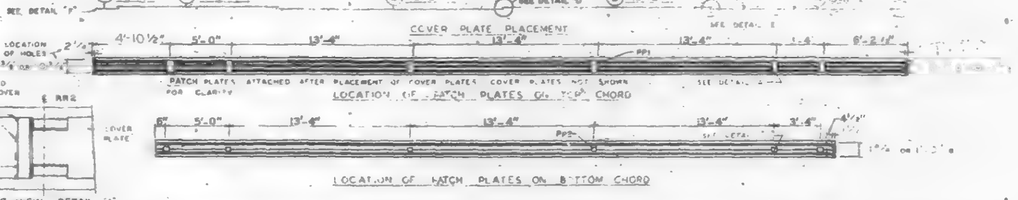
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3-5 4-1-68	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 10/23/68	DRAWN BY [illegible] DATE [illegible] 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE 1968	IN CHARGE OF [illegible]
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 281	STRUCT. NO. B1C

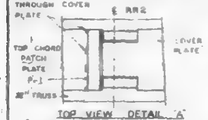


PANEL NO. BID SIZE 13'-4" x 59'-5"

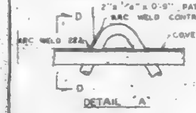
℄ DIMENSION HC4 ARE RELATED TO HOLES, BUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES





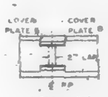


TOP VIEW DETAIL "A"

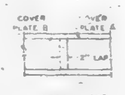


DETAIL "A"

SECTION D-D



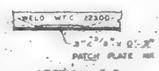
DETAIL "D"



DETAIL "E"

COVER PLATES 20 GA THK

DETAIL "C"



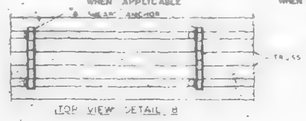
SECTION E-E

DETAIL "F"

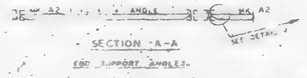
DETAIL "G"

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

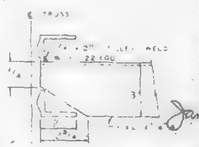
FIELD PUNCH COVER PLATES OVER END STIFFENERS WT'S 22300



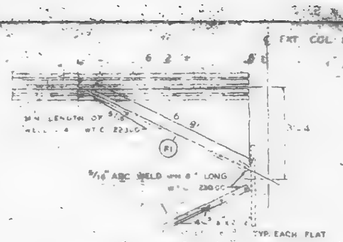
TOP VIEW DETAIL "B"

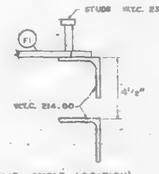


SECTION "A-A"
END SUPPORT ANGLES



DETAIL
END SUPPORT ANGLE ATTACHMENT





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF. DWGS.
FLOOR TRUSSES	T1D	4	C32T1D - 59'-5"	ST 201.3
BRIDGING TRUSSES	T1B	4	24T13 - 13'-3"	ST 413
3"x2½"x⅜" ANGLE	A2	4	3"x2½"x⅜" x 5'-11½"	ST 403
	A4	8	3"x2½"x⅜" x 13'-8"	ST 403
DIAGONAL FLATS	F1	6	1'-6" x ⅜" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2"x⅜" x 1'-0"	ST 400
	PP2	12	2" x ⅜" x 0'-3"	ST 400
COVER PLATES	A	2	⅜" x 0'-35" x 13'-2"	ST 400
	B	4	9" x 0'-135" x 15'-2"	ST 403
	C	2	9" x 0'-135" x 13'-2½"	ST 403
	D	2	9" x 0'-135" x 2'-1"	ST 403
ANGLE CLIPS	C1	16	2"x 4½"x¼"x 0'-8"	ST 400
SHEAR ON HOR.	SA2	6	¾" ø REBAR x 0'-6"	ST 400
DAMPING SADDLE	DS1	1	3½"x 3'-2 ⅛" x 1'-6"	ST 298
	DS2	1	3½"x 3'-2 ⅛" x 3'-8"	ST 298
CONNECTION BAR	CB1	4	1"⅛ x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3'-6" x 3"-4" x 0'-10"	ST 400
	P2	4	4'-6" x .38" x 0'-8"	ST 400
	P3	4	4'-6" x .38" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

DIF
DWGS

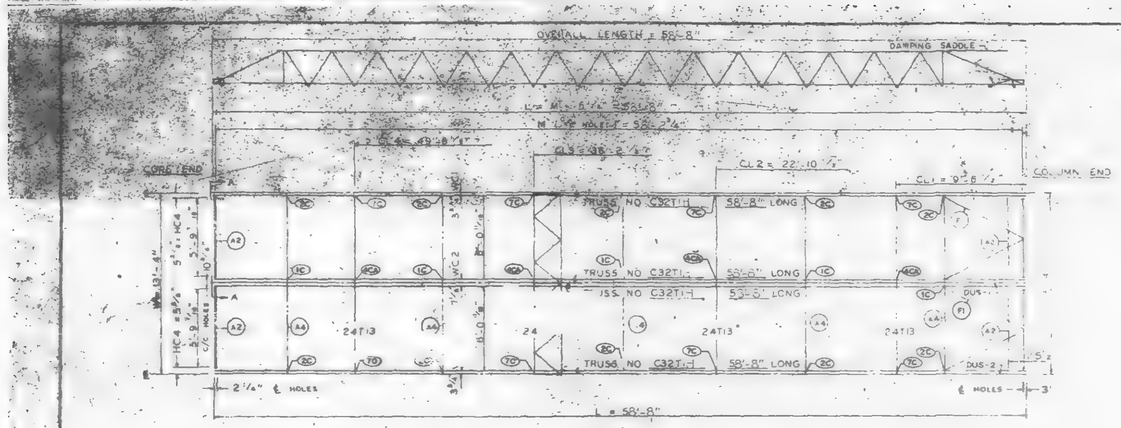
3A1	23 4.30	1.50
3B1	15 A.S.	5-6-68
3B4	42	A 1.68
	14	2.68
4B2		3.68
	4	58
7 396.3		5.58

TYPICAL PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS B1-B2 N

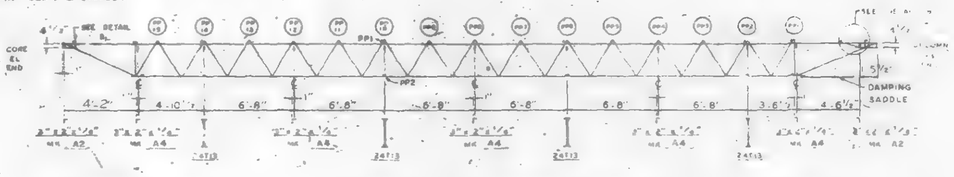
PANEL 9.6 13'-4" x 59'-5"

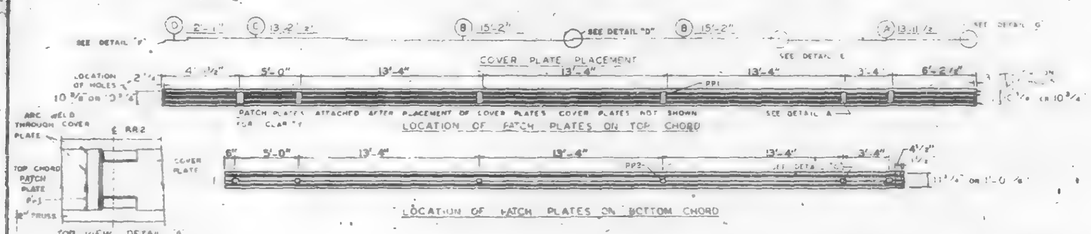
FABRICATION BY: LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 483 5 4 1-68 PLATE
APPROVED FOR FABRICATION BY PORTA DATE 10/23/68
DRAWN BY DATE 1958
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY DATE 1958 IN CHARGE OF
LACLEDE STEEL CO.
DETAILED BY A.G. KERR
FABRICATION CONT. NO. WT C 221
SHEET NO. FP B1

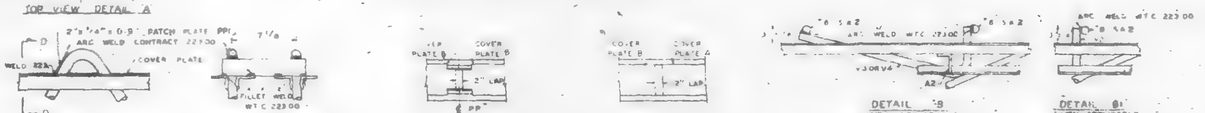


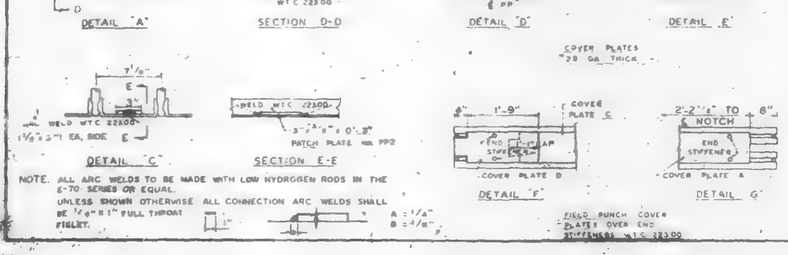
PANEL NO. B1H SIZE 13'-4" x 58'-8"

℄ℓ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

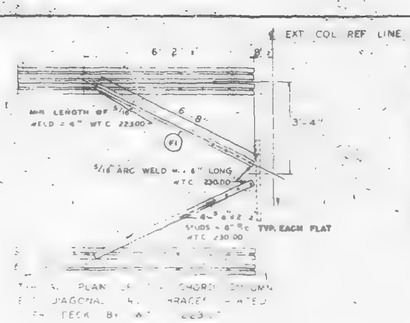








NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" = 1" FULL THROAT FILLET.



REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	SEE DRWG.
FLOOR TRUSSES	T1H	4	C32T1-H - 58'-8"	ST 201
	T1G	4	C32T1-G - 58'-8"	
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST 213
3"x2"x1/4" ANGLE	A2	6	3"x2"x1/4"x5'-11 5/16"	ST 403
	A4	8	3"x2"x1/4"x13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2"x 5/8"x 8'-8"	ST 402
PATCH PLATES	PP1	12	2'-3" x 4" x 0'-9"	ST 400
	PP2	12	3'-1" x 5/8" x 0'-3"	ST 400
COVER PLATES	A	2	9' x .0135 x 3'-11 1/16"	ST 303
	B	4	9' x .0135 x 13'-2"	ST 303
	C	2	9' x .0135 x 13'-2 1/2"	ST 303
	D	2	9' x .0135 x 2'-1"	ST 303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
"B" SHEAR ANCHOR	SA2	6	"B" REBAR x 0'-6"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3" x 2 5/8" x 0'-8 7/8"	ST 298
	DUS 2	1	3 1/2" x 3" x 2 5/8" x 3'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3/4" x 3 1/8" x 8 1/4"	ST 400
	P2	4	5/16" x .328" x 1'-8"	ST 400
	P3	4	5/16" x .328" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, ie. (12), (B), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

REF DRWG

7 AB4 1,2,1&3,9	1-3-68
7 AB4 1,5 & 8	5-6-68
7 AB4 12	4-1-68
" 4	10-20 5'
7 AB4 2	1-2-68
7 AB1 2	2-5-68
7 AB2 8	2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 72-82 (N)

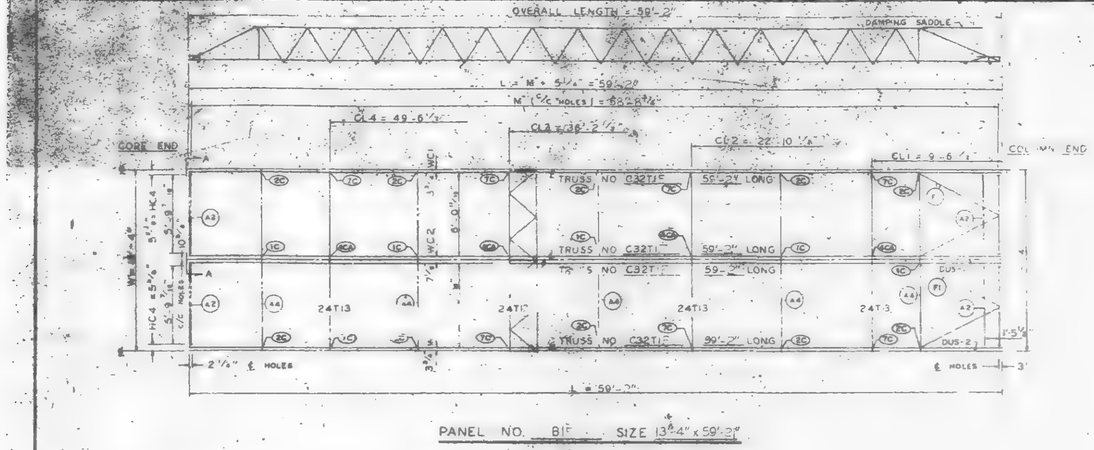
PANEL B1H - 13'-4" x 58'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-5 4-1-68 PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 10/23/68	DRAWN BY DATE 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY DATE 1968
DETAILED BY A C WEBER		FABRICATION CONT. NO. W.T.C. 221

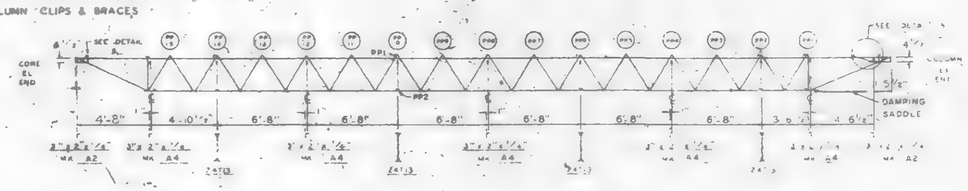
IN CHARGE OF DESIGN

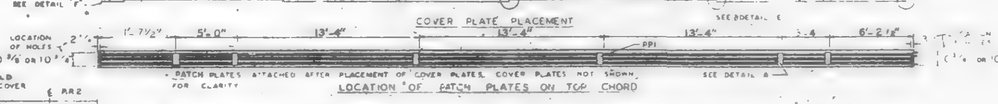
SHEET NO. FD B1



PANEL NO. B1F SIZE 13'-4" x 59'-2"

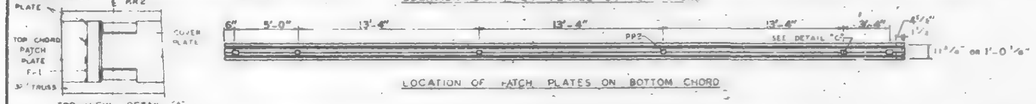
℄ & DIMENSION 'HC4' ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



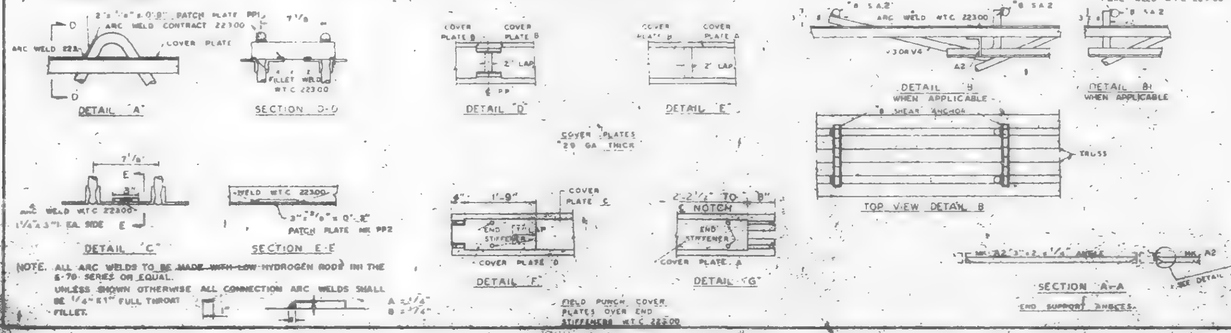


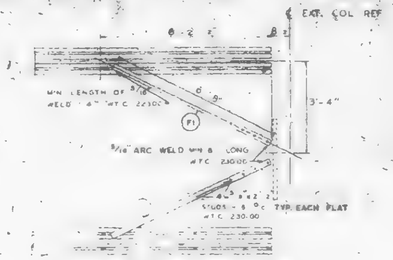
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" & 5/16" FULL THROAT FILLET.

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL SEE PANEL

MARK	MATERIAL	PCS.	SIZE	WEIGHT
	FLOOR TRUSSES	T1	4	C32T13 - 59'-2"	ST 800
	BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	ST 218
A2	3"x2"x5/16" ANGLE	A2	4	3"x2"x1'-11 5/8"	ST 403
A4	3"x2"x5/16" ANGLE	A4	8	3"x2"x1'-3"	ST 403
C1	DIAGONAL FLATS	C1	4	1/2" x 3" x 6'-8"	ST 402
PP1	PATCH PLATES	PP1	12	2"x1'-9"x1'-9"	ST 400
PP2	PATCH PLATES	PP2	12	3" x 3" x 0'-3"	ST 430
A	COVER PLATES	A	2	9" x 0.135" x 13'-11 1/2"	ST 303
B	COVER PLATES	B	4	6" x 0.135" x 15'-2"	ST 303
C	COVER PLATES	C	2	9" x .035" x 13'-2 1/2"	ST 303
D	COVER PLATES	D	2	9" x 0.035" x 2'-1"	ST 303
C1	ANGLE CLIPS	C1	16	2"x1 1/2"x5/16"x 0'-8"	ST 400
SA2	"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-8"	ST 400
DUS-1	DAMPIN SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 3'-6 7/8"	ST 200
DUS-2	DAMPIN SADDLE	DUS-2	1	3 1/2" x 3 1/2" x 3'-6 7/8"	ST 200
CB1	CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
P1	CONNECTION PLATES	P1	5	3 1/2" x 3 1/2" x 8 1/2"	ST 400
P2	CONNECTION PLATES	P2	4	4 1/2" x .30" x 0'-9"	ST 400
P3	CONNECTION PLATES	P3	4	4 1/2" x .30" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

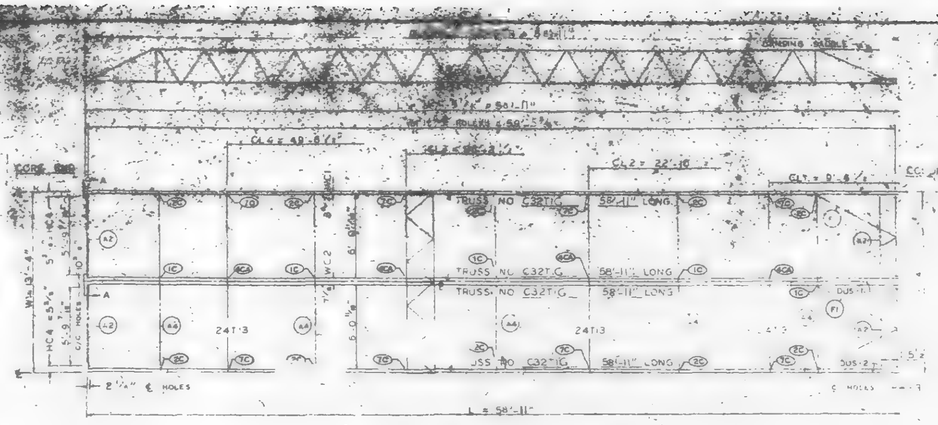
REF DRWG

7-A84-3,3.1 & 3B	1-3-68
7-A84-15 & 15	5-6-68
7-A84-42	4-1-68
SA-24	10-20-67
7-A83-2	1-3-68
7-A9.2	2-5-68
7-A84-8	2-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

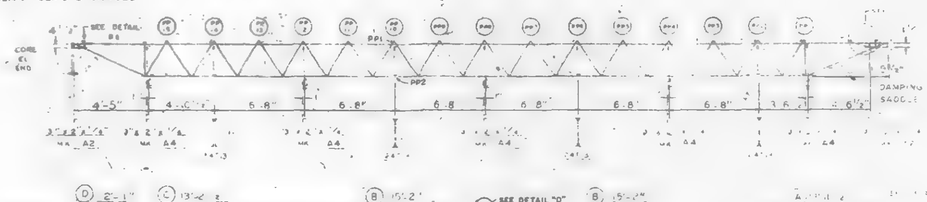
BLDG. A FLOORS 47-48(S), 47-48, 70-71(N)
PANEL B1F - 13'-4" x 59'-2"

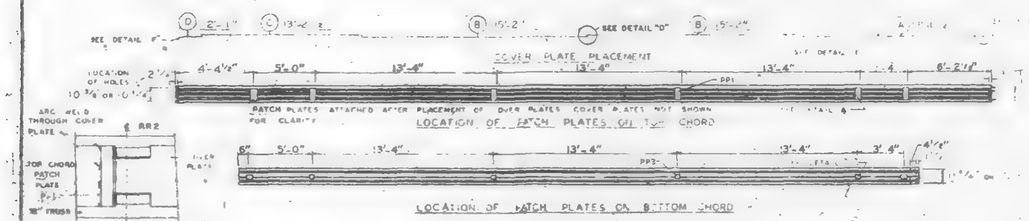
FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	7-A83-5 4-1-68 PLATE
APPROVED FOR FABRICATION BY	FOR PONYA DATE 6/28/68	DRAWN BY DATE	6/28/68
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY DATE	IN CHARGE OK
DETAILED BY		FABRICATION CONT. NO. W.T.C. 221	AGENCY OK



PANEL NO. BIG SIZE 13'-4" x 58'-11"

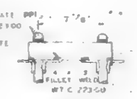
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



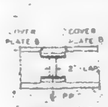


TOP VIEW DETAIL A

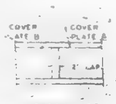
DETAIL "A"



SECTION D-D

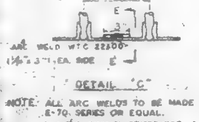


DETAIL "D"



DETAIL "E"

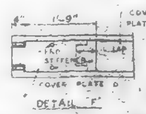
COVER PLATES 20 GA THICK



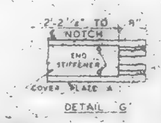
DETAIL "C"

SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



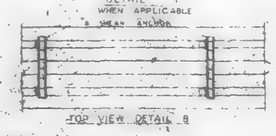
DETAIL "F"



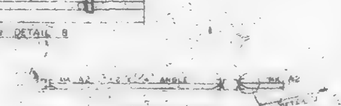
DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS @ C 22200

DETAIL "H"



TOP VIEW DETAIL B

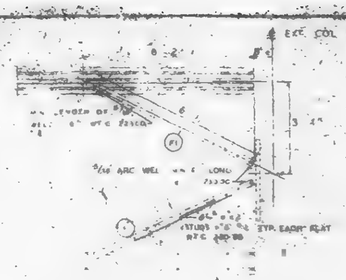


SECTION A-A

END SUPPORT ANGLES

DETAIL

END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL FOR DETAILS

MATERIAL	MK	PCS	SIZE	WT PER PC
FLOOR TRUSSES	T1G	6	C32T1G - 58'-11"	ST 2216
BRIDGING TRUSSES	T1B	4	R47T13 - 13'-3"	ST 218
3"x2"x1/4" ANGLE	A8	4	3 x 2"x 1/4" x 5'-10 15/16"	ST 403
	A4	5	3"x 2"x 1/4" x 13'-3"	ST 403
DIAGONAL FLATS	F1	4	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	8" x 1/4" x 0'-8"	ST 400
	PP2	12	3" x 5/8" x 0'-3"	ST 400
		16	2" x 1/4" x 0'-6"	ST 400
7/8" SHEAR ANCHOR	SA8	6	7/8" REBAR - 0'-1"	ST 400
DAMPING SAGGER	DUS			
CONNECTION BAR	CB1	4		
CONNECTION PLATES	P1	5	1/2" x 1'-6" x 8'-7/8"	ST 400
	P2	4	4'-7/8" x .38" x 0'-8"	ST 400
	P3	4	4'-1/8" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

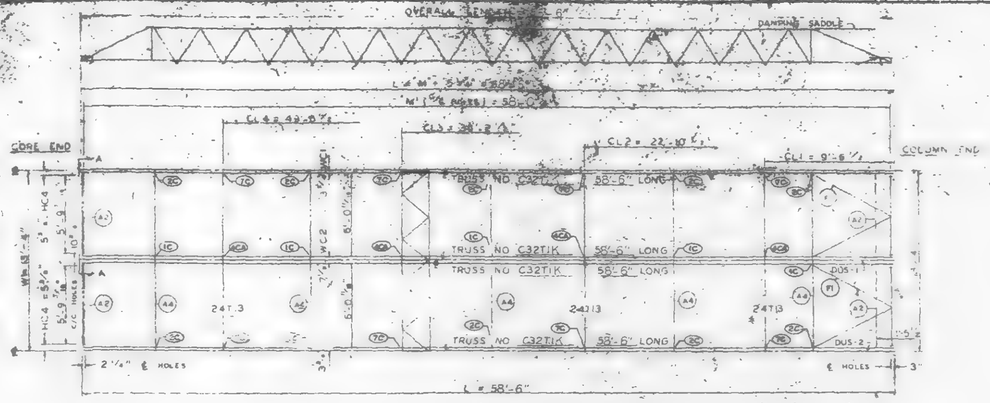
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 39 40 LENGTH & SKETCH

PANEL NO BIG SIZE 13'-4" x 58'-11"

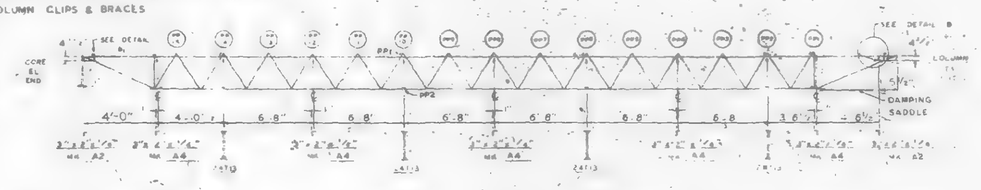
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 4083 2 68	PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 10/23/68	DRAWN BY	DATE
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	CHECKED BY	DATE
BY LACLEDE STEEL CO. DETROIT A.G. WEBER		DATE 1-24-1969	CHGD. NO.
		WTS 3.21	SHEET NO FD 81

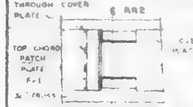
FABRICATION BY LACLEDE STEEL COMPANY



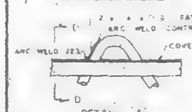
PANEL NO. B1K - SIZE 13'-4" x 58'-6"

℄ & DIMENSION NC4 ARE RELATED TO HOLES P.J.T IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

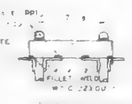




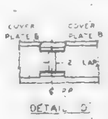
TOP VIEW DETAIL A



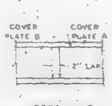
DETAIL 'A'



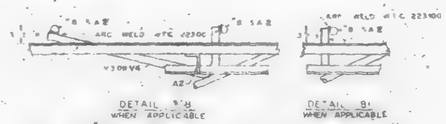
SECTION D-D



DETAIL 'D'

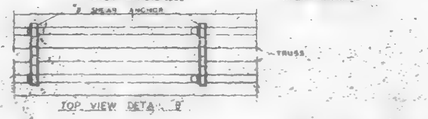


DETAIL 'E'



DETAIL 'B' WHEN APPLICABLE

DETAIL 'B1' WHEN APPLICABLE



TOP VIEW DETAIL 'B'

DETAIL 'C'

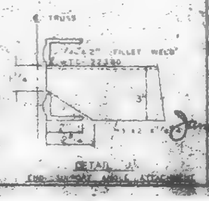
SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70- SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x1" FULL THROAT FILLET

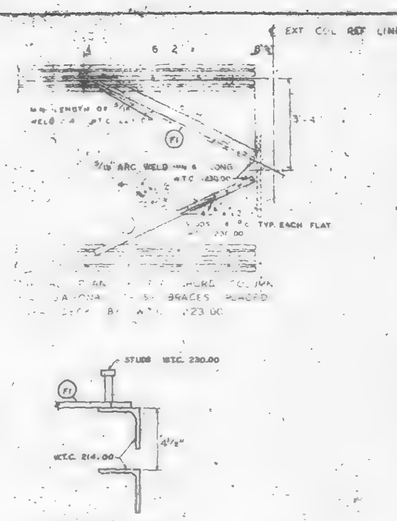
DETAIL 'F'

DETAIL 'G'

SECTION A-A
END SUPPORT ANGLES



DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, ie., (16), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL P.J.T. CORE

MATERIAL	MARKS	No.	SIZE	SPEC
FLOOR TRUSSES	W4	6	C32TIK - 58'-6"	ST400
BRIDGING TRUSSES	T13	4	24T13 - 13'-4"	ST400
3" x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 3'-11 1/8"	ST403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST403
DIAGONAL FLATS	F1	2	1" x 4 1/2" x 8'-8"	ST402
PATCH PLATES	PP1	12	2" x 1'-4" x 0'-9"	ST400
	PP2	12	3" x 2" x 0'-3"	ST400
COVER PLATES	A	2	9" x 0.135" x 13'-11 7/8"	ST303
	B	4	9" x 0.135" x 15'-2"	ST303
	C	2	9" x 0.135" x 13'-2 1/2"	ST303
	D	2	9" x 0.135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
3/4" ℄ SHEAR ANCHOR	SA2	6	3/4" ℄ REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2" x 3 1/2" x 1/4" x 8'-8 7/8"	ST298
	DUS-2	1	3 1/2" x 3 1/2" x 1/4" x 3'-7/8"	ST298
CONNECTION BAR	CB1	4	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/4" x 8'-1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

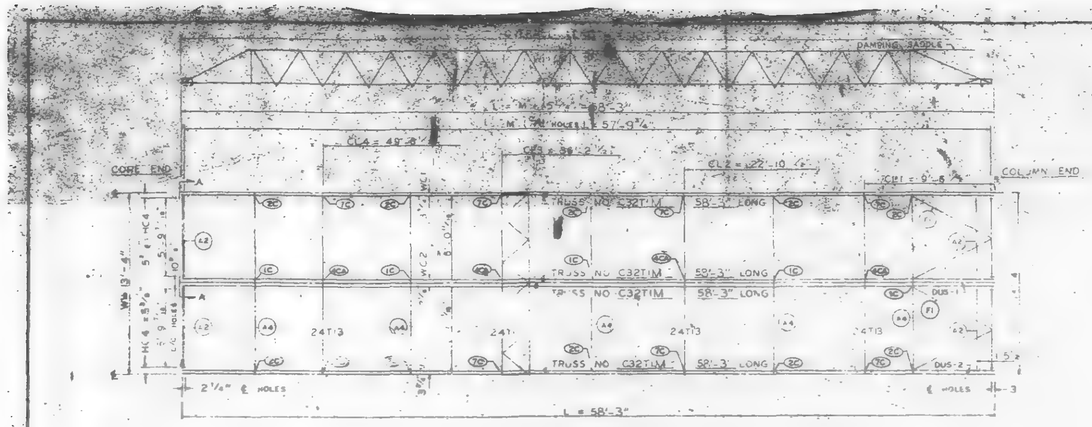
REF. DWG.
- 1 AMA 13L630
- 2 SEE DET A
- 3 CWS 42
- 4
- 5 AB3-2
- 6 AB1-2
- 7 SB2-2

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 45-46(S) & 46(N)
PANEL B1K - 13'-4" x 58'-6"

FABRICATION BY LACLEDE STEEL COMPANY

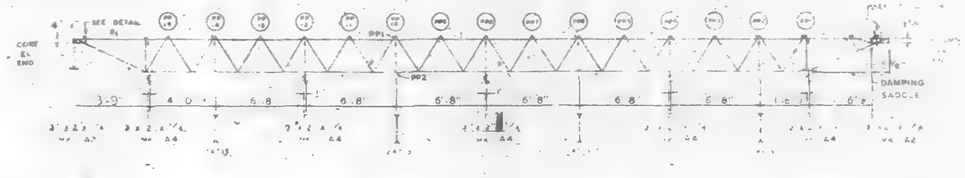
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO.	T 483-13
APPROVED FOR FABRICATION	DATE 10/23/68	DRAWN BY	
BY FOR PONYA		DATE	1968
APPROVED FOR FABRICATION	DATE	CHECKED BY	
BY FOR FABRICATION		DATE	1968
DETAILED BY A.S. PEARCE		FABRICATION CONT. NO.	221

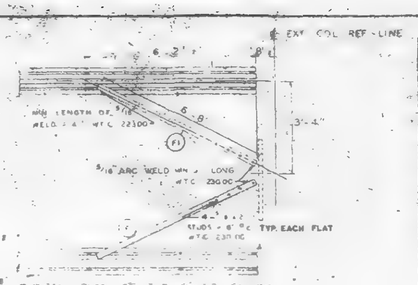
SHEET NO. CD 201

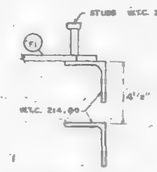


PANEL NO. B1M , SIZE 13'-4" x 58'-3"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



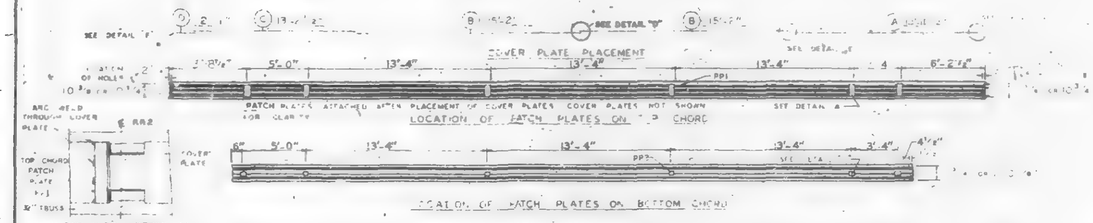


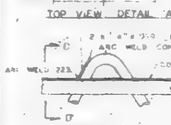


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1M	4	C32T1M - 58'-3"	ST201M
BRIDGING TRUSSES	T13	4	24T13 13'-3"	ST213
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4"x5'-11 15/16"	ST403
	A4	5	3"x2"x1/4"x 13'-3"	ST403
DIAGONAL FLATS	F1	4	2'-4 5/8" x 8"	ST472
PATCH PLATES	PP1	12	2" x 4'-0 3/8"	ST400
	PP2	12	3" x 4'-0 3/8"	ST400
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ANGLE [illegible]	[illegible]	16	2"x1 1/2"x1/4"x0'-6"	ST400
"B" SHEAR ANGLE	[illegible]	6	"B" REBAR x 0'-[illegible]	ST400
DAMPING SHIM	DSH-1	[illegible]	3" x 4" x [illegible] x 6"	ST398
	DUS-2	[illegible]	3" x 4" x [illegible] x 6"	ST398
CONNECTION BAR	CB1	4	[illegible] x 1'-3"	ST400
CONNECTION PLATES	P1	5	3'-8" x 2'-6" x 0'-1/2"	ST400
	P2	4	4'-1/2" x .38" x 0'-0"	ST400
	P3	4	4'-1/2" x .38" x 1'-0"	ST400

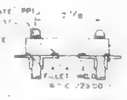
NUMBERS AND LETTERS IN ELLIPSES, ie. (15), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.



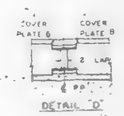


TOP VIEW DETAIL 'A'

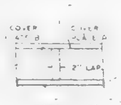
DETAIL 'A'



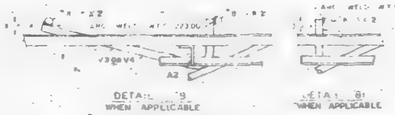
SECTION 'D-D'

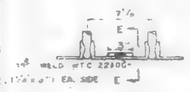


DETAIL 'D'

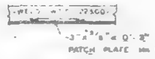


DETAIL 'E'



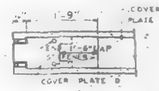


DETAIL 'C'

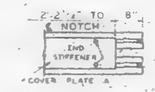


SECTION 'E-E'

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"-5/16" FULL THROAT FILLET.

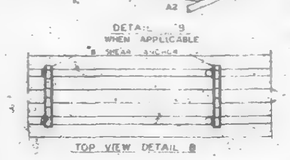


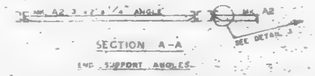
DETAIL 'F'



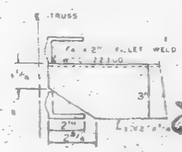
DETAIL 'G'

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22200





SECTION A-A
END SUPPORT ANGLES



DETAIL '4'
END SUPPORT ANG. ATTACHMENT

NO.	DATE	REVISION	BY

REF DRWG
[illegible] 3-3-68
[illegible] 5-6-68
[illegible] 4-[illegible]-68
[illegible] 4-[illegible]-68
ABG 2 [illegible]-[illegible]-68
B 2 2-5-68
SBZ L 5-68

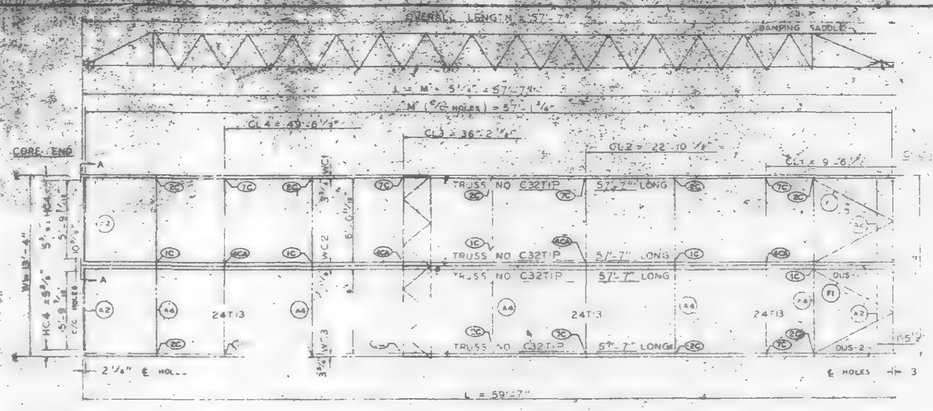
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 W

PANEL B1M - 13'-4" x 58'-3"

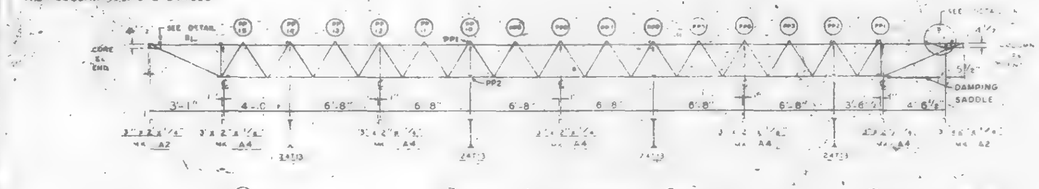
FABRICATED BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	CD 5 4 1 GR PLATE C
APPROVED FOR FABRICATION BY	[illegible] FOR PONTA	DATE 10/29/68	DRAWN BY [illegible] DATE [illegible]
APPROVED FOR FABRICATION BY	FOR FABRICATOR	DATE	CHECKED BY [illegible] DATE [illegible]
DETAILED BY	LACLEDE STEEL A.C. WEBER		FABRICATION CONT. NO. WTC 221

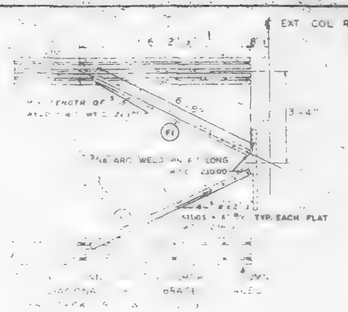
IN CHARGE OF PROD. ENG.
SHEET NO. CP H 1

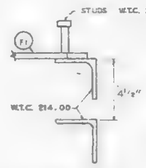


PANEL NO. BIP SIZE 13'-4" x 57'-7"

℄ 2 DIMENSION HC4 ARE RELATED TO HOLES BUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

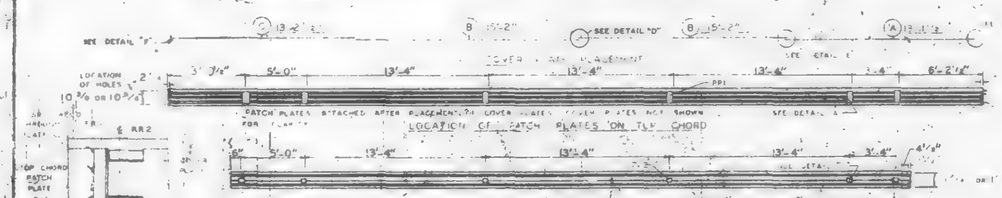






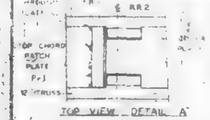
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF. DR WG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1P	4	C32T1 - 5	ST 201P
BRIDGING TRUSSES	T13	4	24T13 13'-3"	ST 213
3"x2"x1/4" ANGLE	A2	4	3"x2"x 4'-5 11/16"	ST 403
	A4	5	3"x2"x 4'-6 3/16" x 13'-3"	ST 403
DIAGONAL FLATS	F	4	1/2"x 5"x 6'-8"	ST 402
PATCH PLATES	PP1	12	3/8" x 1'-4" x 0'-9"	ST 400
	PP2	12	3/8" x 1'-4" x 0'-3"	ST 400
GUSSET PLATES	A	2	9" x 0'-0 5/8" x 13'-11 1/2"	ST 403
	B	4	8" x 0'-0 5/8" x 15'-2"	ST 403
	C	2	9" x 0'-0 5/8" x 13'-2 1/2"	ST 403
	D	2	9" x 0'-0 5/8" x 2'-1"	ST 403
ANGLE CLIPS		16	3"x3"x1/4"x4"x0'-6"	ST 400
3/8" SHEAR ANCHOR	SA2		3/8" REBAR x 0'-9"	ST 400
DAMPING SADDLE	SADH	1	3"x3"x3'-3 3/8"x4"x5'-3 7/8"	ST 298
	SADS-2	1	3"x3"x3'-3 3/8"x4"x3'-5 7/8"	ST 298
CONNECTION BAR	CB1	4	1"x1"x1'-3"	ST 400
CONNECTION PLATES	P1	8	3'-6" x 8"x 8 1/4"	ST 400
	P2	4	4'-2" x .38" x 0'-9"	ST 400
	P3	4	4'-2" x .38" x 1'-0"	ST 400

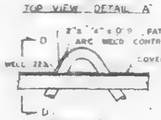


LOCATION OF PATCH PLATES ON TOP CHORD

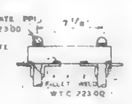
LOCATION OF PATCH PLATES ON BOTTOM CHORD



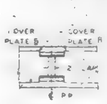
TOP VIEW DETAIL A



DETAIL "A"

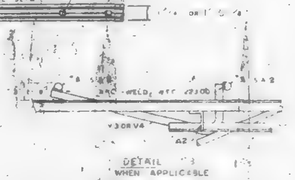


SECTION D-D

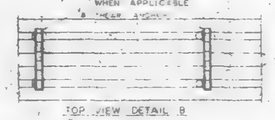


DETAIL D

DETAIL E



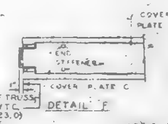
DETAIL J WHEN APPLICABLE



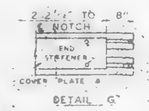
DETAIL C

SECTION E-E

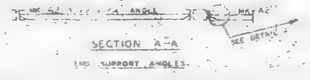
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"-5/16" FULL THROAT FILLET.



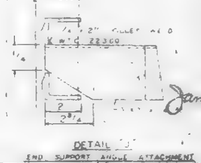
DETAIL F



DETAIL G



SECTION A-A



DETAIL END SUPPORT ANGLE ATTACHMENT

NUMBERS AND LETTERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

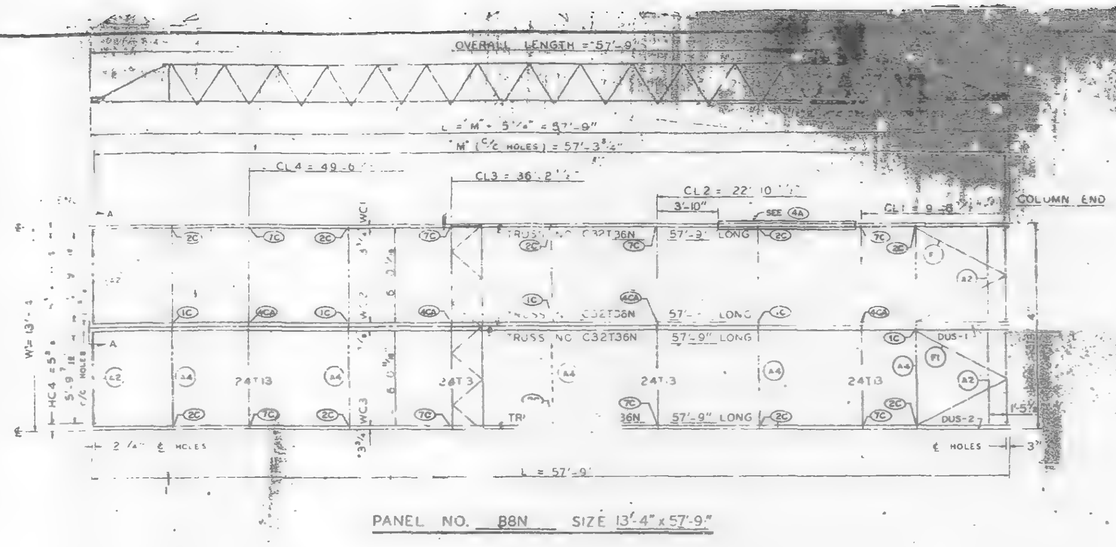
NO.	DATE	REVISION	BY

REF DRAWS

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

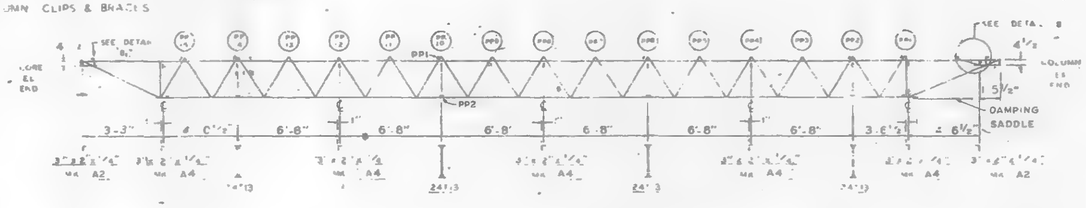
BLDG A FLOORS 74(N)
PANEL BIP - 13'-4" x 57'-7"

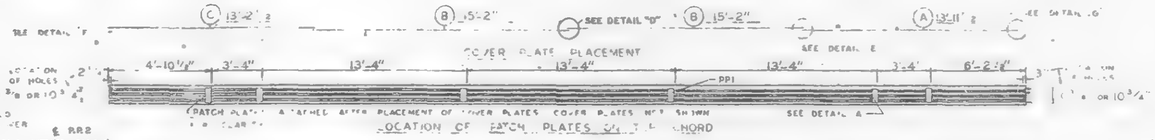
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION DATE 10/25/68 FOR PONYA
APPROVED FOR FABRICATION DATE
BY FOR SHOP DWG
DETAILED BY A.G. WEBER
DESIGN DRAWING NO. 7-A-3-4-1-SK PLATE
DRAWN BY DATE OCT 15 1968
CHECKED BY T.M.CHUNG DATE 12/4/1968
FABRICATION CONT. NO. W.F.C. 221
IN CHARGE OF WORK MGR. SHEET NO. FOR BID



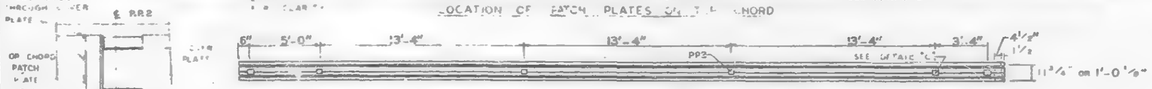
PANEL NO. B8N SIZE 13'-4" x 57'-9"

℄ & DIMENSION HOLE ARE NOT ATTACH TO HOLES BUT IN BEARING END OF BLOCK TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES





LOCATION OF PATCH PLATES ON TOP CHORD



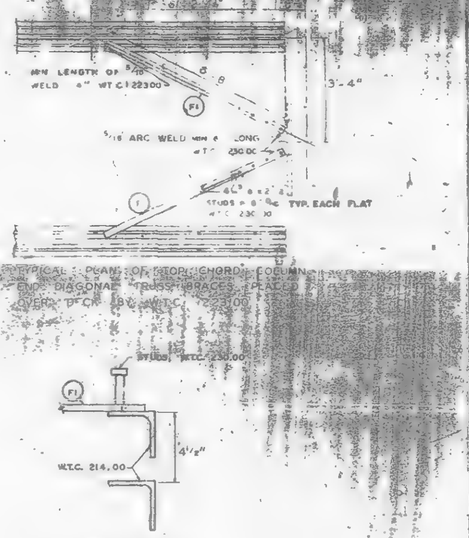
LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW DETAIL A

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET

A = 1/4"
B = 1/4"

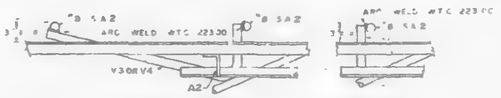
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300

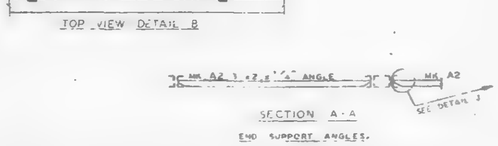


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

ITEM	MATERIAL	MK.	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES		T13N	4	32 T 13N - 57'-9	ST 236N
BRIDGING TRUSSES		T13	4	24 T 13 - 13'-3"	ST 213
3" x 2" x 1/4" ANGLE		A2	4	3" x 2" x 4'-5" - 11 1/8"	ST 403
		A4	5	3" x 2" x 1/4" x 13'-3"	ST 403
DIAGONAL FLATS		F1	4	1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES		PP1	2	8" x 1'-4" x 0'-9"	ST 400
		PP2	2	8" x 3'-3 3/8" x 0'-3"	ST 400
COVER PLATES		A	2	0.1X, 0.1357" x 13'-11 1/2"	ST 303
		B	4	0.1X, 0.1357" x 13'-2"	ST 303
		C	2	0.1X, 0.1357" x 13'-2 1/2"	ST 303
ANGLE CLIPS		CL	16	2" x 1 1/2" x 1 1/4" x 0'-6"	ST 400
ø 3/4 SHEAR ANCHOR		SA2	64	3/4" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE		DUS-1	1	3 1/2" x ø 3 1/2" x 3/16" x 3'-5 1/8"	ST 298
		DUS-2	1	3 1/2" x ø 3 1/2" x 3/16" x 3'-6 7/8"	ST 298
CONNECTION BAR		CB1	4	1" x 5/8" x 1'-3"	ST 400
CONNECTION PLATES		P1	8	3 1/2" x 3 1/2" x 8 1/2"	ST 400
		P2	4	4 1/2" x .38" x 0'-8"	ST 400
		P3	4	4 1/2" x .38" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 230.





NO	DATE	REVISION	BY

REF DRWG
- 7 AB4-3 10-15-68
- 7 AB4-15,16,39 & 41 7-22-68
- 7 AB4-31 1-3-68
- SA 24 1-6-69
- 7 AB3-14 1-6-69
- 7 AB1-32 1-6-69
- 7 AB4-8 7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 44 (SOUTH ONLY)

PANEL B8N - 13'-4" x 57'-9"

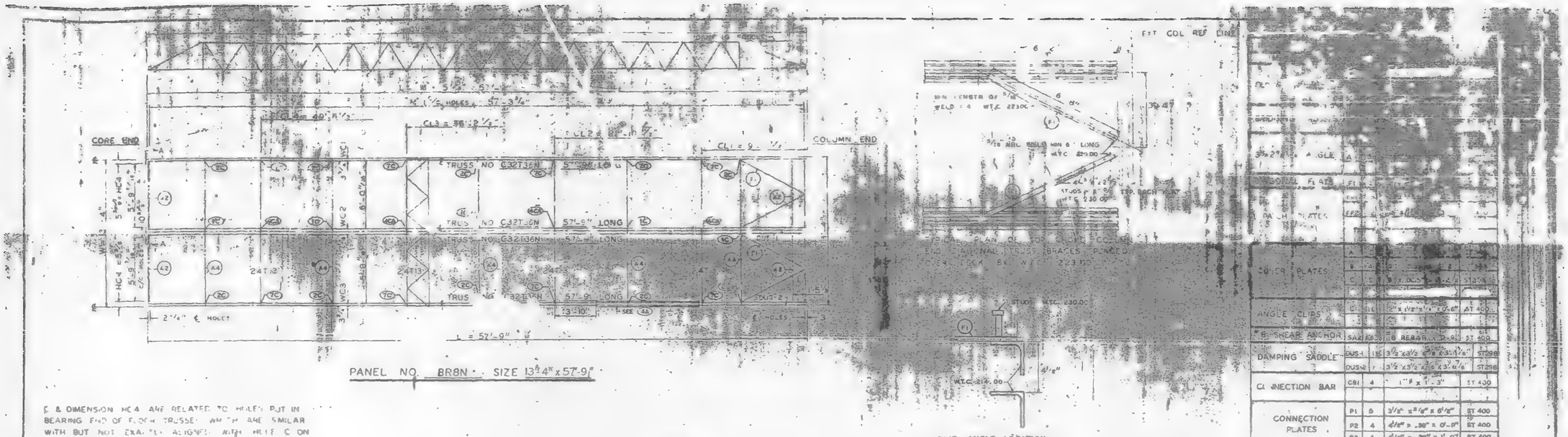
FABRICATED BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS — DESIGN DRAWING NO. 7 483-54 — PLATE

APPROVED FOR FABRICATION FOR PONTA — DATE 4/24/69 — DRAWN BY [illegible] DATE APRIL 1, 1969

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE — CHECKED BY T.M.CHURA DATE APRIL 1, 1969 — IN CHARGE OF PROD. DEV.

DESIGNED [illegible] — FABRICATOR CONT NO W T C 221 — SHEET NO FD B8N



COVER PLATES	A			
	B			
	C	8	0.0.5	ST 36
ANGLE CLIPS	C1	16	3" x 1 1/2" x 1/4" x 0'-6"	AST 400
B. SHEAR ANCHOR	SA2	28	8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	18	3 1/2" x 3 1/2" x 2 7/8" x 3 1/16"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 2 7/8" x 3 1/16"	ST 298
CONNECTION BAR	CB1	4	1" x 1" x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3/16" x 8 1/16" x 8 1/16"	ST 400
	P2	4	4 1/16" x .38" x 0'-0"	ST 400
	P3	4	4 1/16" x .38" x 1'-0"	ST 400

E & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES

NUMBERS AND LETTERS IN ELLIPSES ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 230.

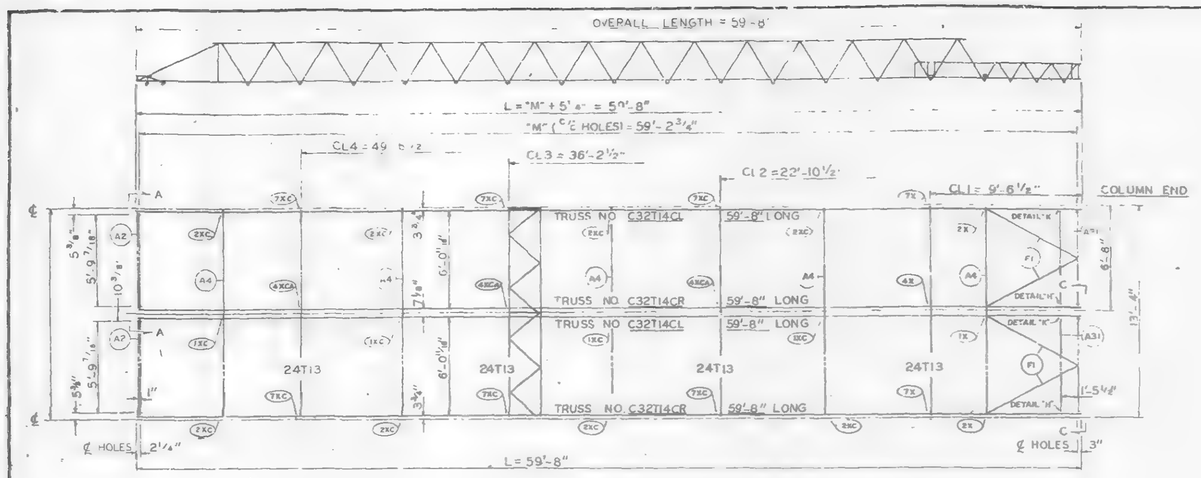
NO.	DATE	REVISION	BY

REVISED	NO. 2	10-15-68
"	" 1505.39 & 41	7-22-68
"	" 3.1	1-3-68
"	"	1-6-69
"	" 55	1-6-68
"	" 32	1-6-69
"	" 9	7-22-68

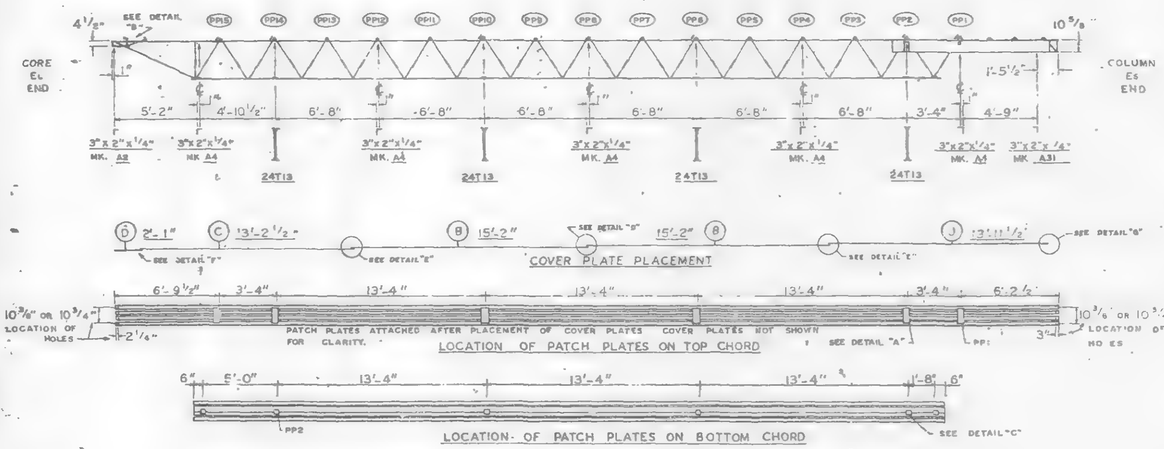
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

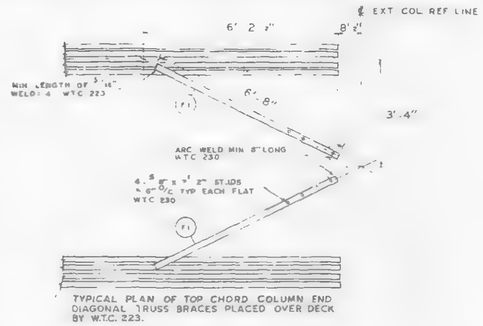
BLDG A FLOORS 44 (SOUTH ONLY)
PANEL BR8N 13'-4" x 57'-9"

FABRICATION BY	ACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7 483 55 PLATE
APPROVED FOR FABRICATION BY	FOR DOMINA DATE 4/22/69	DRAWN BY	DATE APRIL 1, 1969
APPROVED FOR FABRICATOR BY	DATE	CHECKED BY T.M.CHURA	DATE APRIL 1, 1969 IN CHARGE OF FLOOR DEV.
DETAILED BY		FABRICATION WT. NO WT.	221. SHEET NO FP BR8N

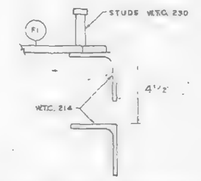


PANEL NO. B2C SIZE 13'-4" x 59'-8"





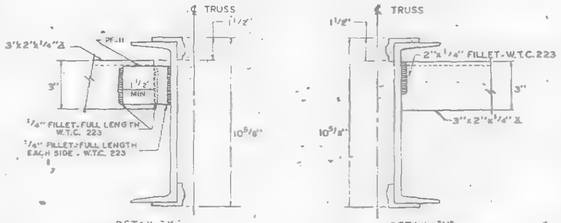
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-5"	ST 214CL
	T14CR	2	C32T14CR x 59'-5"	ST 214CL
BRIDGING TRUSSES	T13	4	24T13 x 13'-3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x 4"x 5'-11"	ST 403
	A4	5	3"x2"x 4"x 5'-11"	ST 403
	A31	2	3"x2"x 4"x 5'-4"	ST 410
CLOSURE PLATES	PP1	2	3"x 1/4" x 0'-2 3/8"	ST 402
DIAGONAL FLATS	F1	4	1" x 3" x 6'-6"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	2	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135"x 15'-2"	ST 303
	C	2	9"x.0135"x 13'-2 1/2"	ST 303
	D	2	9"x.0135"x 2'-1"	ST 303
	J	2	9"x.0135"x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x1"x2"x.25"x 6"	ST 400
7/8" SHEAR ANCHOR	SA2	4	7/8" REBAR x 0'-9"	ST 400
	CB1	5	7/8" x 0'-3"	ST 400
CONNECTION BAR				
CONNECTION PLATES	P1	4	3"x3"x 8"x 0'-8 1/2"	ST 400
	P2	4	4 1/2"x 8.39"x 0'-9"	ST 400
	P3	4	4 1/2"x.39"x 1'-0"	ST 400
	P9	4	3"x 1 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (A)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



DETAIL "K" END SUPPORT ANGLE ATTACHMENT

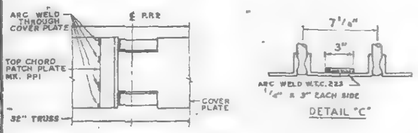
DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE

NO.	DATE	REVISION	BY

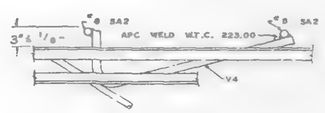
REF DRWG.

7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

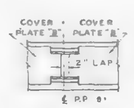


TOP VIEW - DETAIL "A"

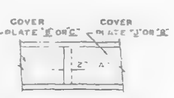
DETAIL "C"



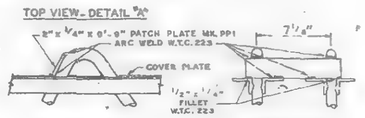
DETAIL "B"



DETAIL "D"

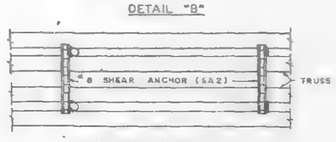


DETAIL "E"

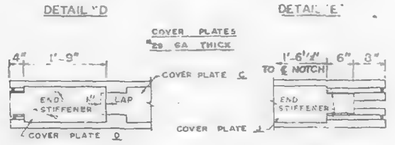


DETAIL "A"

SECTION B-B



TOP VIEW DETAIL "B"

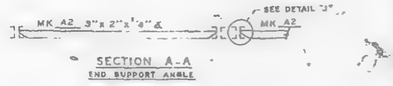


DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "J" END SUPPORT ANGLE ATTACHMENT



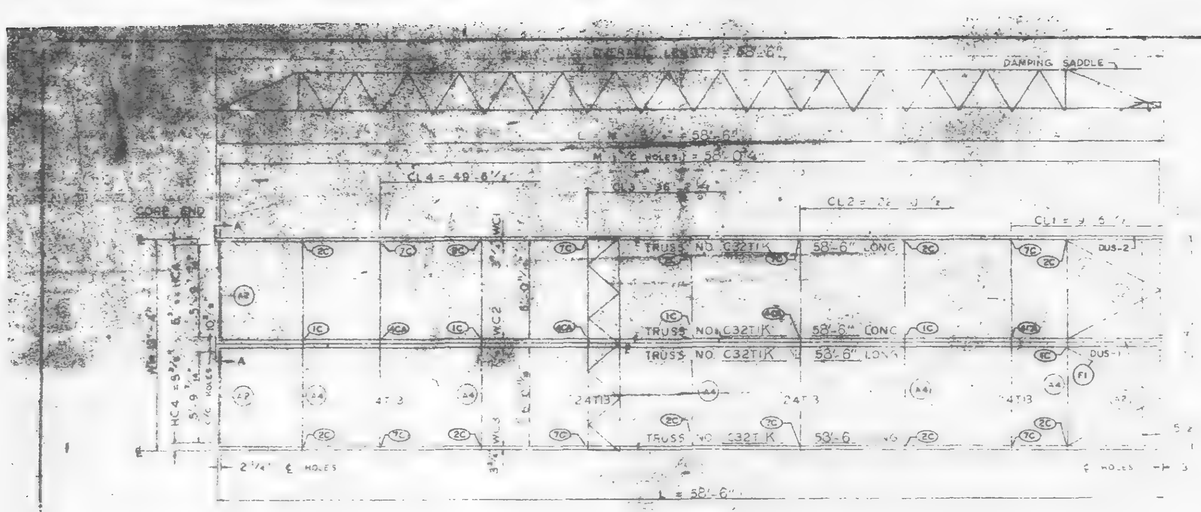
SECTION A-A END SUPPORT ANGLE

FLOOR PANEL DETAILS
FOR
ANCHORAGE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

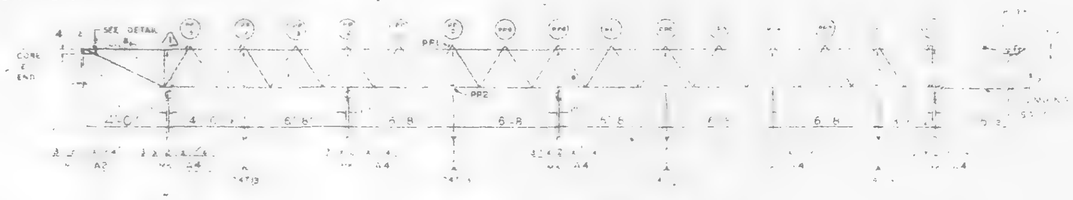
PANEL B2C-13 w's 59'-8"

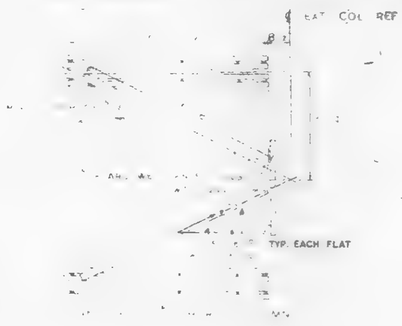
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-26 PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 6/6/69	DRAWN BY LuR DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221
		IN CHARGE OF PROD. DEP.
		SHEET NO FD B2C

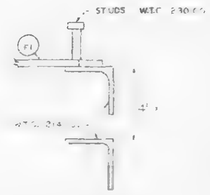


PANEL NO. B1K SIZE 3 x 58'-6"

℄ & DIMENSION HC4 ARE RELATIVE TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE H-COLUMN CLIPS & BRACES







CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL

MATERIAL	MK	FOR	
FLOOR TRUSSES	T1K	4	C32T1K
BRIDGING TRUSSES	T1B	4	24T1
ANGLE	A2	4	3" x 2" x 1/4" x [illegible]
	A4	5	3" x 2" x [illegible]
DIAGONAL FLATS	F1	4	2 1/2" x [illegible]
PATCH PLATES	PP1	12	2 3/8" x [illegible]
	PP2	12	3'-3" x [illegible]
[illegible]	A	2	9" x 0.135" x A3-11 1/2"
[illegible]	B	4	9" x 0.135" x 15'-2"
[illegible]	C	2	9" x 0.135" x 13'-2 1/2"
[illegible]	E	2	6" x 0.[illegible]
[illegible]	F	16	2" x 1 1/2" x 1/4" x 0'-8"
[illegible]	G1	6	[illegible]
[illegible]	G2	2	3 1/2" x 3 1/2" x 3/8" x 3'-8"
[illegible] BAR	CB1	4	1" ℄ x 1'-3"
CONNECTION PLATES	P1	5	3 1/2" x 3/4" x 8 1/2"
	P2	4	4 1/2" x .38" x 0'-8"
	P3	4	4 1/2" x .38" x 1'-0"

NO.	DATE	AS NOTED
5	6-5-68	

REF DRAWG

1	A04-3	10-15-68
	A04-1 PM	7-22-68
4	A04-42	10-10-68
SK	4	6-68
7	A04-6	11-3-68
7	A04-2	7-22-68
7	A04-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 45-1/2 + 45-46

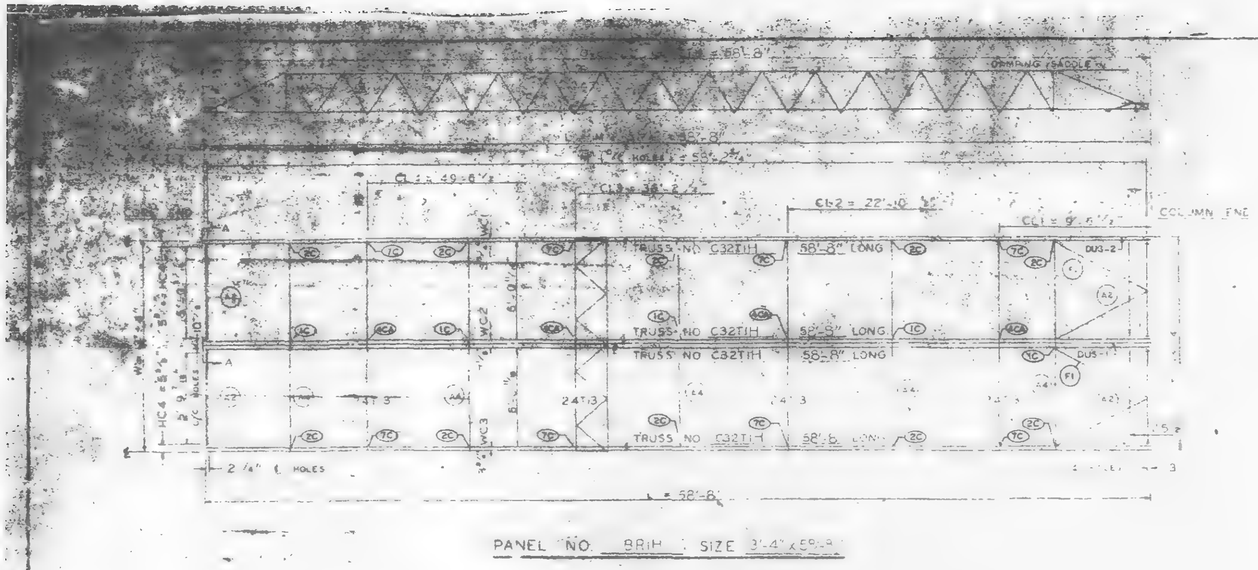
PANEL B1K

BLDG B FLOOR 46 (EAST & WEST) 45 (EAST)

FABRICATED BY JACKSONVILLE STEEL COMPANY
ERECTOR CO.
AT MARION, ILLINOIS

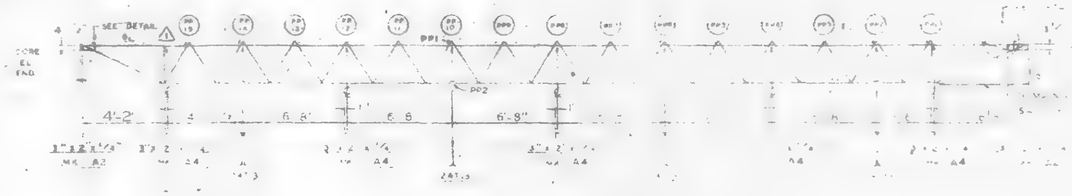
APPROVED FOR FABRICATION	DATE
PONYA	11/1
APPROVED FOR FABRICATION	DATE

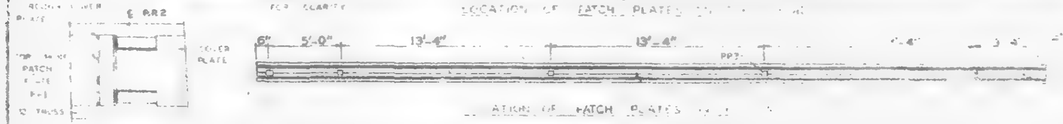
DESIGN DRAWING NO. 7-68
DRAWN BY
DATE
CHECKED BY
DATE
PLANT SECTION

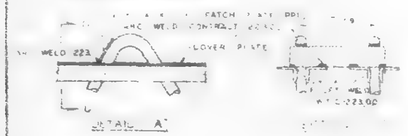


PANEL NO. B8IH SIZE 3'-4" x 58'-8"

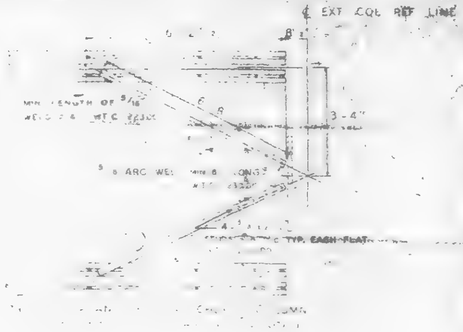
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

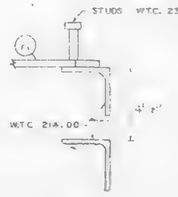






NOTE. ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION SHOP WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET 201 OR 202.

REQUIRED MATERIALS				
MATERIAL	MK	PCS		
FLOOR TRUSSES	[illegible]	[illegible]	[illegible]	
BRIDGING TRUSSES	[illegible]	[illegible]	[illegible]	
3 x 2 1/2 x 5/16 ANGLE	A2	4	[illegible]	
	A4	8	[illegible]	
DIAGONAL FLATS	F1	4	3 1/2" x [illegible]	
PATCH PLATES	PP1	12	[illegible]	
	PP2	12	3'-4" x 5" x 0.34"	ST 400
[illegible] PLATES	A	8	6" x 0.35" x [illegible]	
	B	4	9" x 0.35" x 15'-2"	ST 303
	C	2	9" x 0.35" x 13'-2"	ST303
	D	2	9" x 0.35" x 2'-1"	ST303
ANGLE CLIPS	C	16	2" x 1 1/2" x 1/4" x 7"	ST 400
[illegible] SHEAR ANCHOR	SA2	[illegible]	3/4" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	[illegible]	ST303
	DUS-2	1	3" x 3" x 4 3/8" x 3'-0"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 2 3/8" x 8 1/4"	ST 400
	P2	4	4 1/2" x .38" x 0'-8"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	6-5-69	AS NOTED	R.P.

REF DRWG		
1-AB4 3	1-15-68	
7-584, 15, 16	1-22-68	
7-590-42	10-15-68	
SA 24	1-6-69	
3-AB3-2	1-3-68	
1-AB1 2	1-22-68	
1-AB2-2	1-22-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
PORT OF NEW YORK AUTHORITY

[illegible] RS 10-85(M)

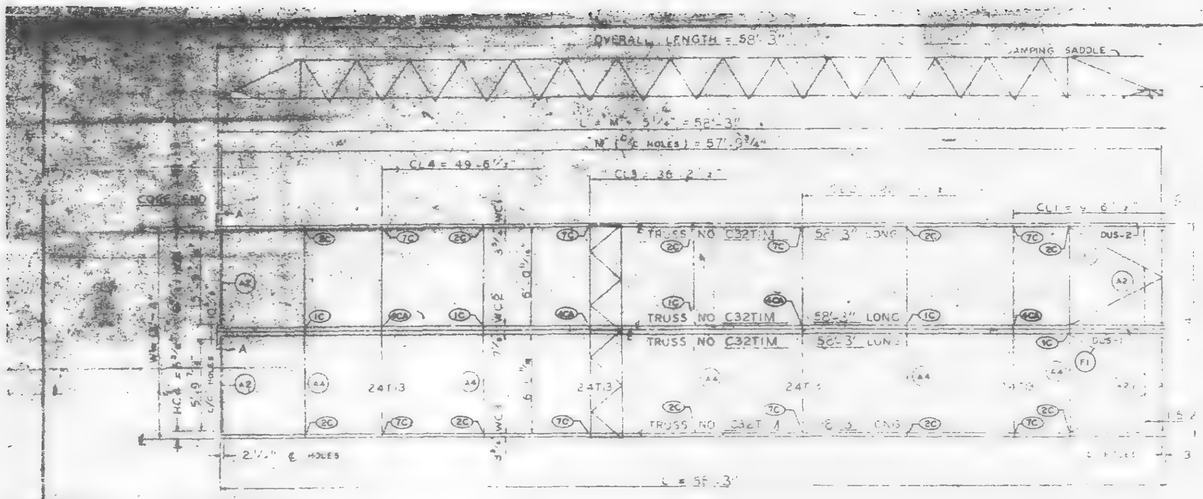
PANEL B8IH 13'-6" x 58'-8"

BLDG. 8 FLOORS 79-80 (WEST) 1

LALLEDE STEEL COMPANY

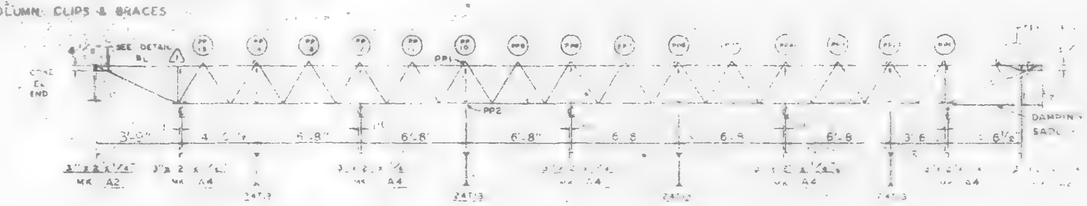
[illegible] ILLINOIS

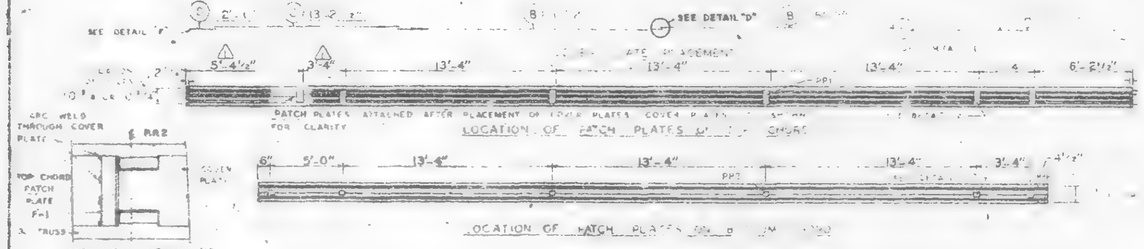
[illegible]		ORDER DRAWING NO.	
[illegible]		7-AB3-6	PLATE
APPROVED FOR FABRICATION	DATE 1/29/68	DRAWN BY [illegible]	
[illegible] FOR FABRICATION	DATE	DATE 10-23-68	
[illegible]		CHECKED BY [illegible]	
[illegible]		DATE	
[illegible]		FABRICATION CLASS [illegible]	
[illegible] WELDS		SIZE B	SHT 1 OF 1

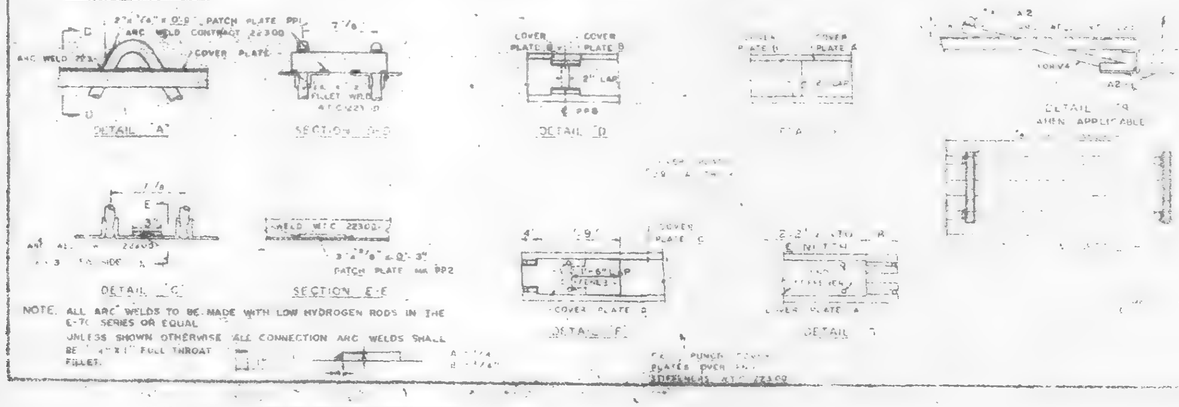


PANEL NO. BRIM SIZE 13' 4" x 58'-3"

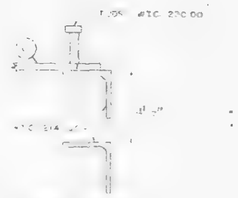
℄ & DIMENSION NO 4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES







NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4' 2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	POS		
FLOOR TRUSSES	T1M	4	C32T1M	
DECKING TRUSSES	T1S	4	C32T1S	
3"x2"x1/4" ANGLE	A2	4	3"x2"x1/4" x 5'-3 1/2"	ST 403
	A4	5	3"x2"x1/4" x 6'-8"	ST 403
DIAGONAL FLATS	F1	4	1/4" x 6" x 5'-8"	ST 400
PATCH PLATES	PP1	12	2'-8"x5/8"x0'-3"	ST 400
	PP2	12	8"x5/8"x0'-3"	ST 400
COVER PLATES	A	2	9"x.0135"x4'-6"	ST 400
	B	4	9"x.0135"x15'-2"	ST 400
	C	2	9"x.0135"x 6'-2 1/2"	ST 400
	D	2	9"x.0135"x 2'-1"	ST 400
ANGLE CLIPS	C	16	2"x1"x1/4"x0'-8"	ST 400
FLOOR STUD ANCHOR	SA2	6	5/8" DIA x 0'-9"	ST 400
DAMPING SADDLE	DUS1		3 1/2"x3 1/2"x 3/8" x 3'-4 1/2"	ST 400
	DUS2		3 1/2"x3 1/2"x 3/8" x 3'-8 1/2"	ST 400
LIFTING BAR	CB1	4	1"x1"x 3'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 1'-6" x 5/16"	ST 400
	P2	8	4 1/2" x 1'-10" x 0'-5/16"	ST 400
	P3	4	4 1/2" x 1'-10" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES, ie. (15), INDICATE CONNECTION DETAILS SHOWN ON SHEET [illegible]

NO.	DATE	REVISION	BY
1	6-5-68	AS NOTED	

⚠ REF DRWG

7-AB4-1	10-15-68
7-AB4-1&2	7-26-68
7-AB4-1&2	10-15-68
SA-1-24	1-6-69
7-AB3-2	1-8-69
7-AB4-2	7-8-68
7-AB3-2	7-22-68

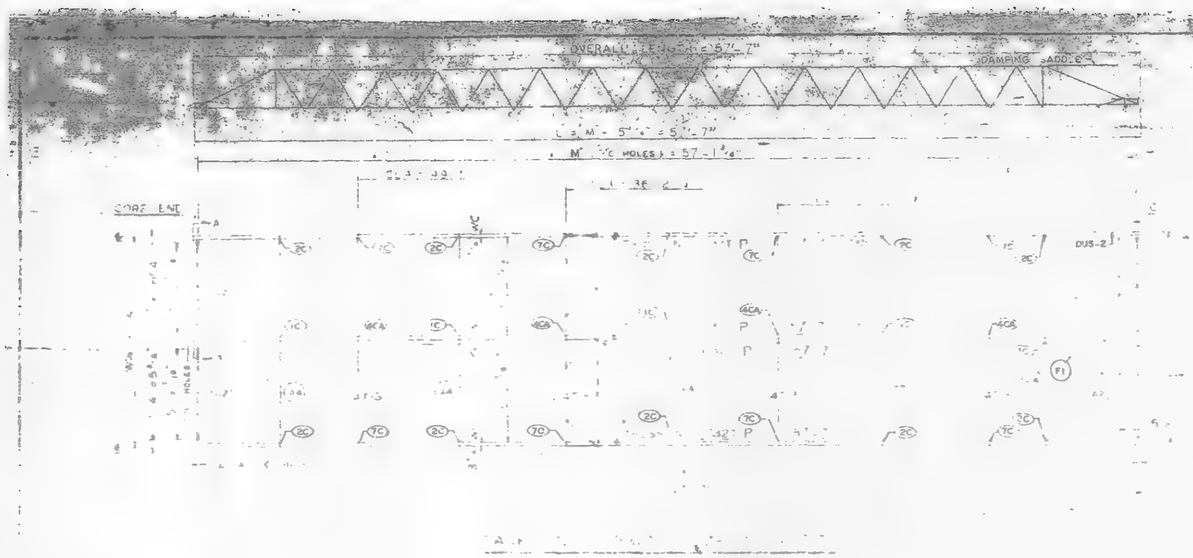
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 7-72 INCL.
PANEL BRIM 13' 4" x 58'-3"
BLDG B FLOORS 72-73 SHEET 1 ⚠

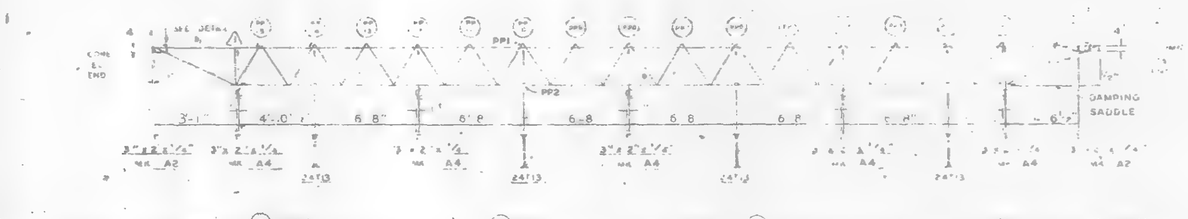
LALLEY STEEL COMPANY
MADISON ILLINOIS

RELEASED FOR FABRICATION	DATE	DRAWN BY	DATE
APPROVED FOR FABRICATION	DATE	CHECKED BY	DATE
		FABRICATION SHEET NO.	
		W.O. #	

CHANGE ORDER NO. 7-AB2-68 DATE

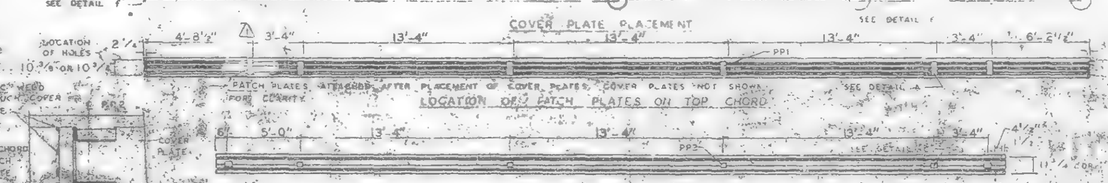


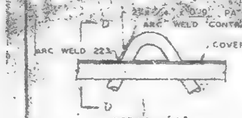
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	GRADE
FLOOR TRUSSES	T1	4	CAMBER 3"	ST 50 W
	T2	4	24'-3 13/16"	ST 21 S
	A1	2	3" x 3" x 4 5/16"	ST 36 S
	A2	5	3" x 3" x 3	ST 36 S
	B	1		
		2		
		16	3" x 2" x 1/4	
CONNECTION PLATES	C1	3	3" x 3" x 6" x 2	
	P2	4	8 1/2" x .30" x 1'-8"	ST 40 W
	P3	1	8 1/2" x .30" x 1'-0"	ST 40 W

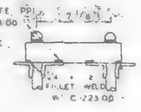


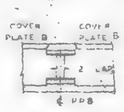
NUMBERS AND LETTERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

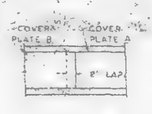
NO.	DATE	REVISION	BY
1	8-5-69	AS NOTED	

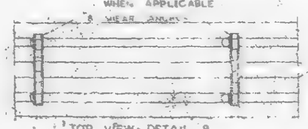


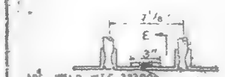




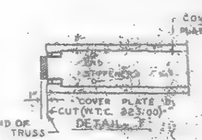


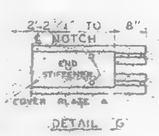


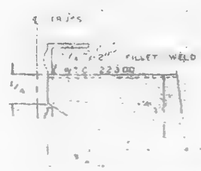




NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.







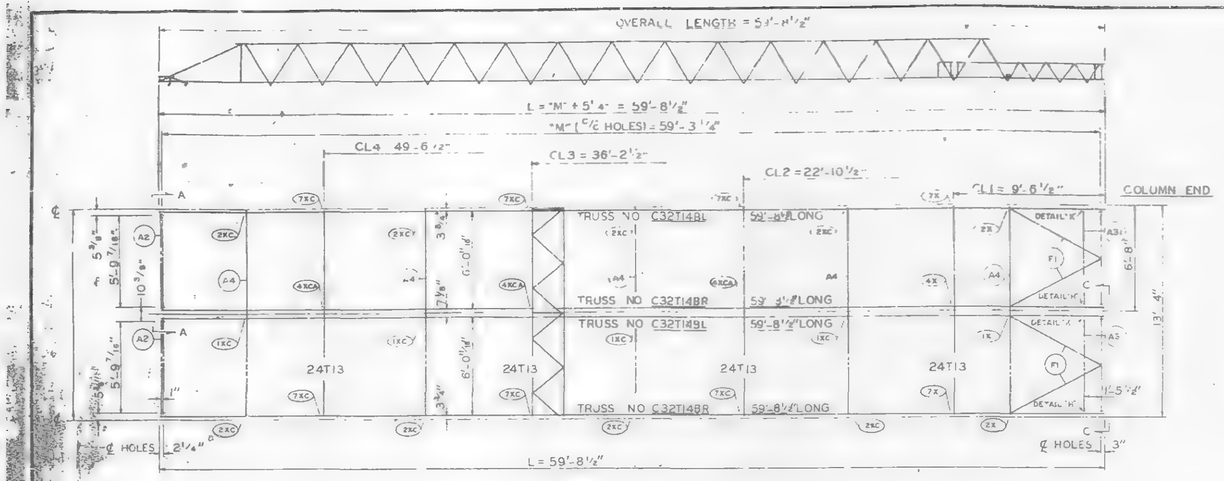
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 74 (N)
PANEL BRIDGE
BLDG. B FLOORS 74 (WEST)

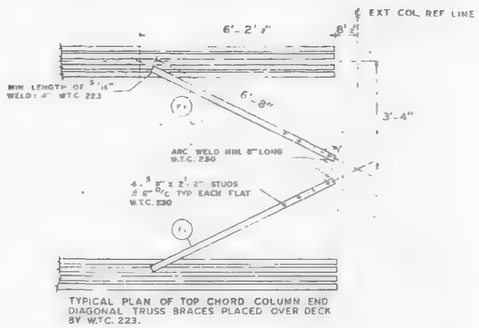
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATOR			DESIGN DRAWING NO.
MARK	NOTE	DATE	PLATE
		1/2/70	DRAWN BY
			DATE
			CHECKED BY
			DATE
			FABRICATION CONT. NO.
			WTC 221

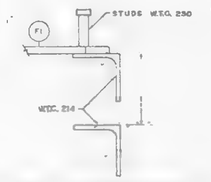
THESE DRWG
SA
SA
SA
SA
SA



PANEL NO. B2B SIZE 13'-4" x 59'-8 1/2"



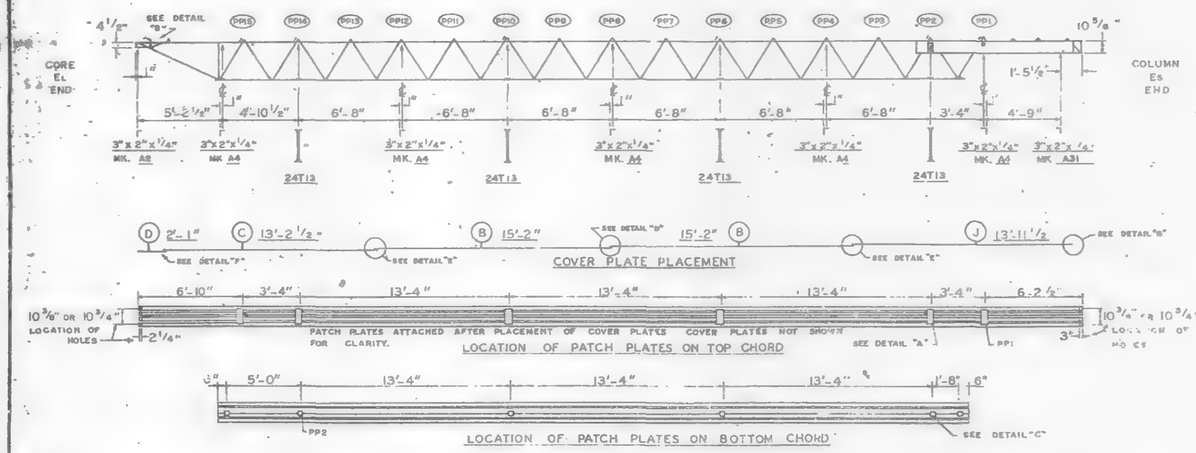
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL LIST				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T14BL	2	12" x 4.0 LBS x 59'-8 1/2"	ST 214BL
	T14BR	2	12" x 4.0 LBS x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	4	24" x 3.0 LBS x 35'-3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3" x 2" x 1/4" x 5'-1"	ST 403
	A4	2	3" x 2" x 1/4" x 4'-5"	ST 403
	A31	2	3" x 2" x 1/4" x 4'-5"	ST 410
CLOSURE PLATES			3" x 4" x 1/4"	
DIAGONAL FLATS			2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	2	2" x 1/4" x 0'-3"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	1	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 3'-2 1/4"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x 2" x .25" x 6"	ST 400
#8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	3" x 3" x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 2" x 3" x 8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4" x 2" x .39" x 1'-0"	ST 400
	P9	4	3" x 1" x 2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (A)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

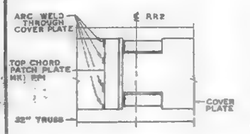


COVER PLATE PLACEMENT

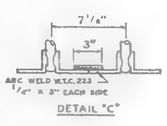
LOCATION OF PATCH PLATES ON TOP CHORD

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY.

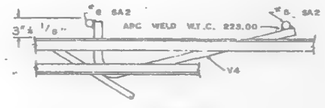
LOCATION OF PATCH PLATES ON BOTTOM CHORD



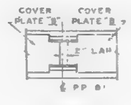
TOP VIEW - DETAIL "A"



DETAIL "C"

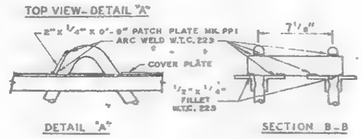


DETAIL "B"



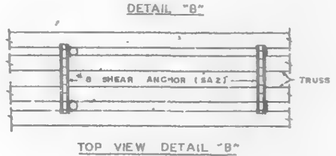
DETAIL "D"

DETAIL "E"

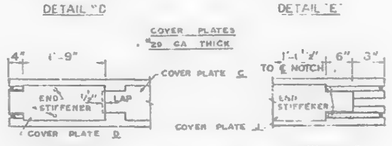


DETAIL "A"

SECTION B-B

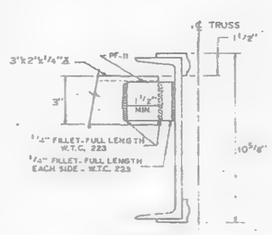


TOP VIEW DETAIL "B"

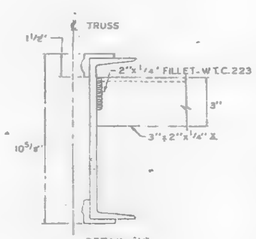


DETAIL "F" DETAIL "G"

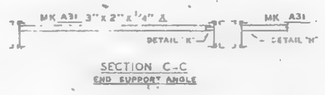
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



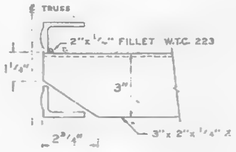
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



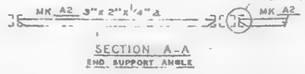
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO	DATE	REVISION	BY

REF DRWG.	
7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	2-22-68
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

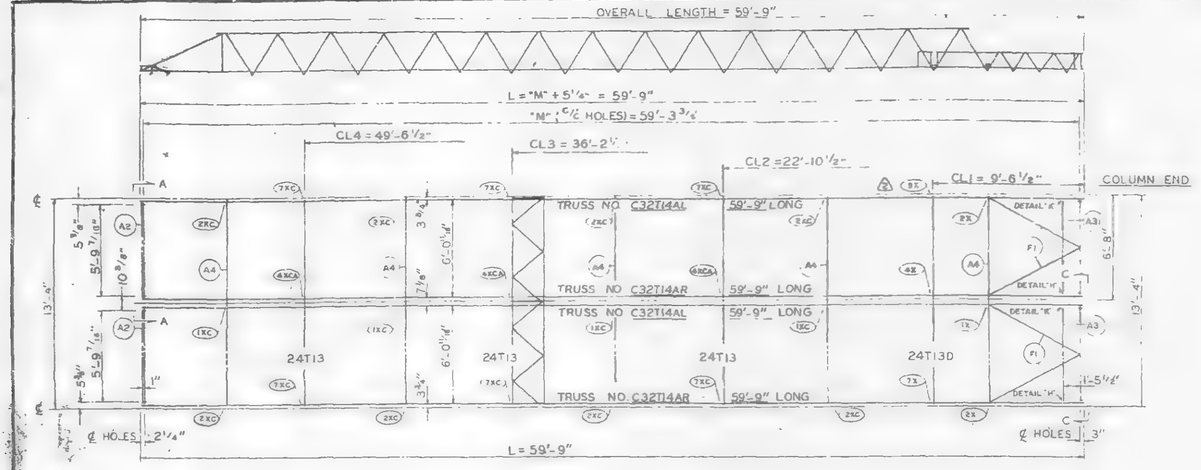
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

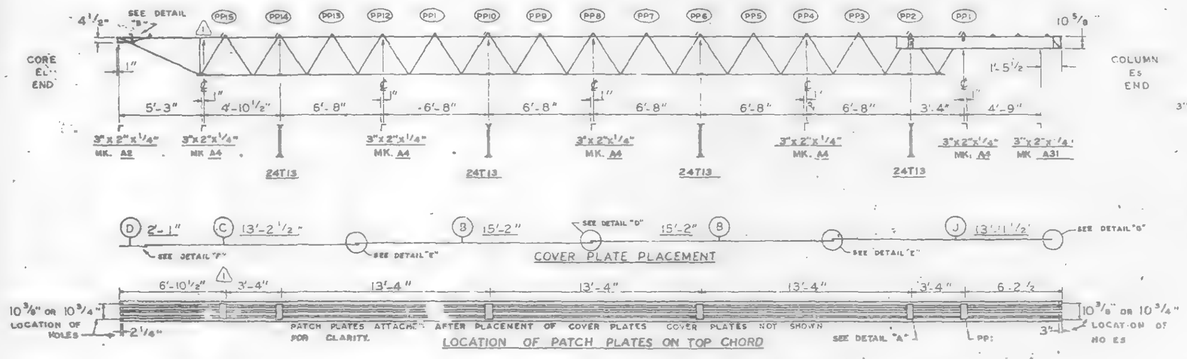
PANEL B2B - 13' 4" x 59' 8 1/2"

FABRICATION BY LAVELLE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO 7-AB3-26 PLATE
APPROVED FOR FABRICATION BY FOR PONTA	DATE 6/6/69
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE
DETAILED BY A.C. WEBER	DRAWN BY LWR DATE APRIL 28, 1969
CHECKED BY T.N. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
FABRICATION CONT NO W.T.C. 221	SHEET NO FD B2B



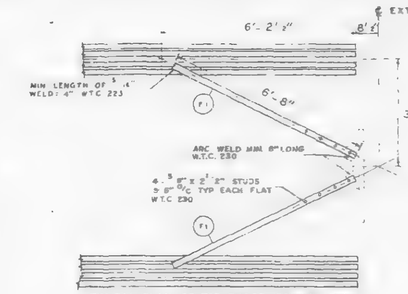
PANEL NO. BR2A SIZE 13'-4" x 59'-9"



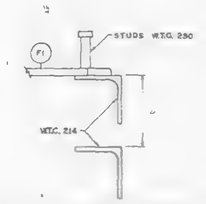
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



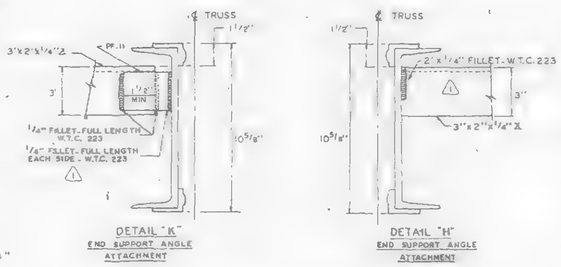
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	1	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x 2"x 1/4" x 5'-11 5/8"	ST 403
	A4	5	3"x 2"x 1/4" x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4" x 5'-8 1/2"	ST 410
CLOSURE PLATES	PF	2	3" x 1/4" x C 2 3/8"	1" x 2
DIAGONAL FLATS	F1	4	1'-3" x 5 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	2	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 13'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/8"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 6"	ST 400
3/8 SHEAR ANCHOR	SA2	4	3/8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3" 2"x 3" x 6"x 0'-6 1/2"	ST 400
	P2	3	4 1/2" x .39" x 0'-9"	ST 400
	P3	3	4 1/2" x .39" x 1'-0"	ST 400
	P9	4	3"x 1'-2"x 1'-2"	ST 409
	P10	1	4 1/2" x .39" x 0'-5"	ST 409
	P11	1	3"x 1'x 6" x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 54 & 92 ARE SHOWN ON SHEETS CD 219 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

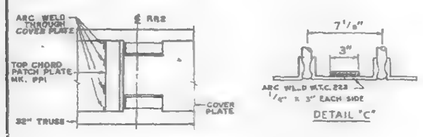


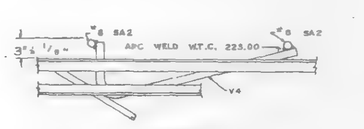
SECTION C-C
END SUPPORT ANGLE

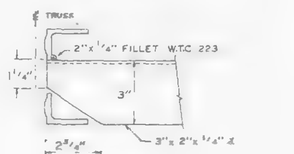
NO.	DATE	REVISION	BY
2	5-12-69	AS NOTED	GDC
1	2-4-69	AS NOTED	GDC

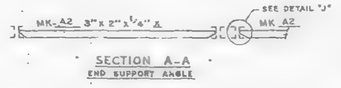
REF DRWG.

7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-A32-8	7-22-68
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68









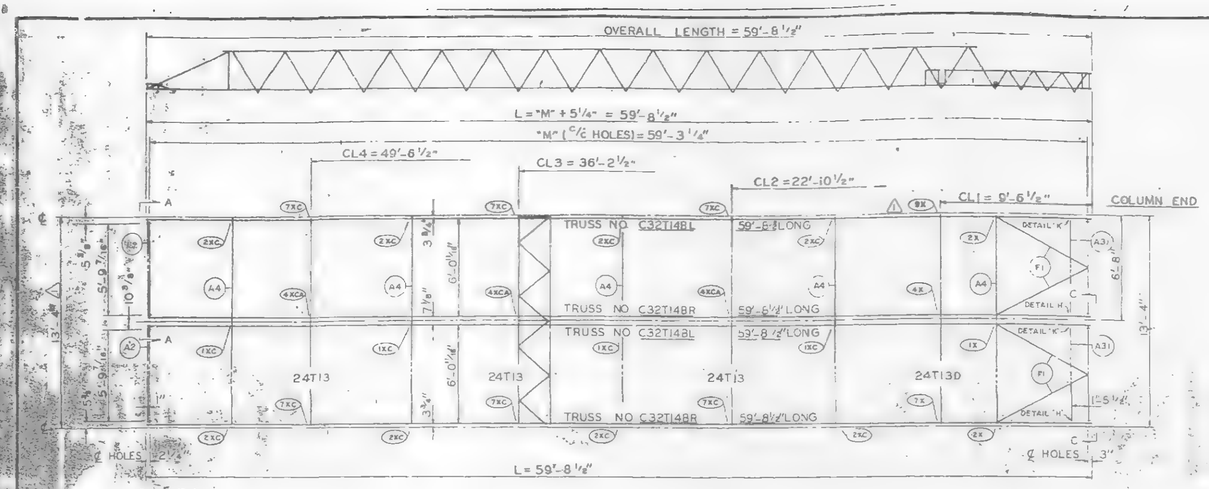
SECTION A-A
END SUPPORT ANGLE

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. C
FOR
THE PORT OF NEW YORK AUTHORITY

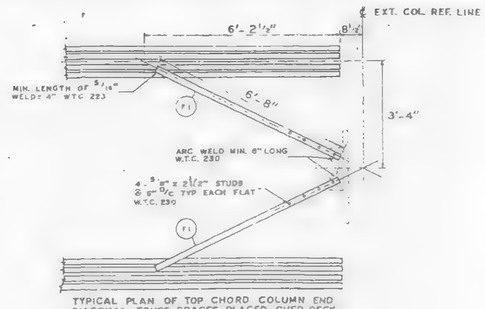
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL BR2A-13'-4" x 59'-9"

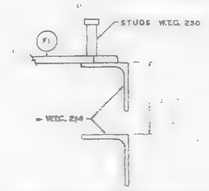
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-27 PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 6/6/69	DRAWN BY DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE DEC. 5, 1968 IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221 SHEET NO FP BR2A



PANEL NO. BR2B SIZE 13'-4" x 59'-8 1/2"



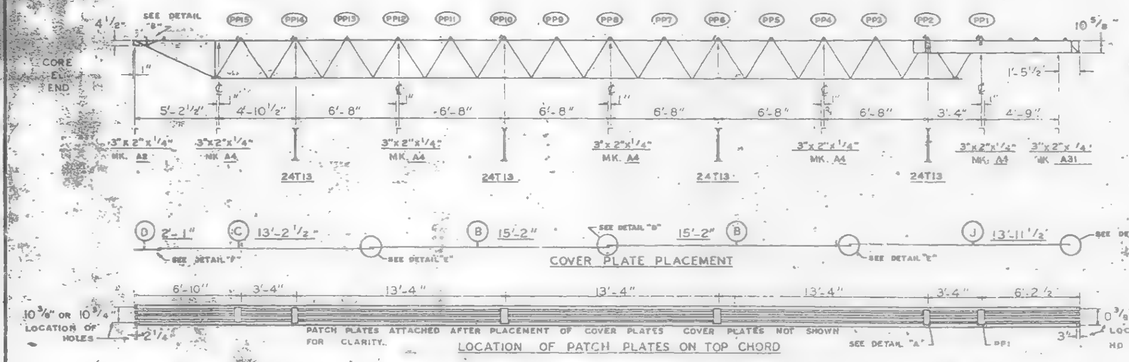
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

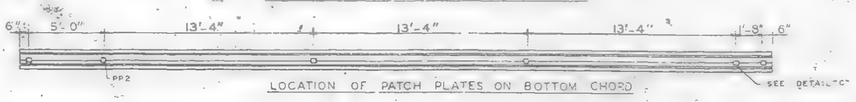
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	2	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	2	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T13	1	24T13 x 13'-3"	BT 213
	T13D	1	24T13D x 13'-3"	BT 213D
3" x 2" x 1/4" ANGLE	A2	2	3" x 2" x 1/4" x 5'-11 5/16"	ST 403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST 403
	A31	2	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF11	2	3" x 1/4" x 0' 2 3/16"	ST 412
DIAGONAL FLATS	F1	4	11 1/2" x 8 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	18	2" x 1 1/2" x .25" x 6"	ST 400
ø 8 SHEAR ANCHOR	SA2	4	ø 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	C81	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400
⚠	P8	4	3" x 1 1/2" x 1'-2"	ST 405
	P10	1	4 1/2" x .39" x 0'-5"	ST 409
	P11	1	3" x 1/4" x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

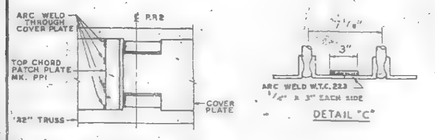


COVER PLATE PLACEMENT

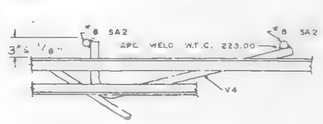
LOCATION OF PATCH PLATES ON TOP CHORD



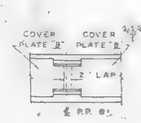
LOCATION OF PATCH PLATES ON BOTTOM CHORD



DETAIL "C"

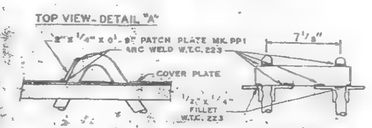


DETAIL "B"



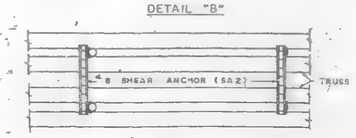
DETAIL "D"

DETAIL "E"

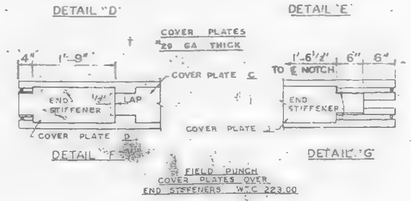


DETAIL "A"

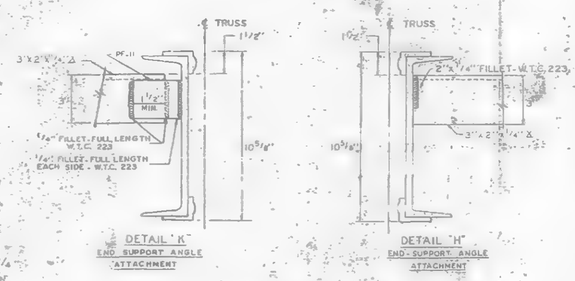
SECTION B-B



TOP VIEW DETAIL "B"



DETAIL "G"

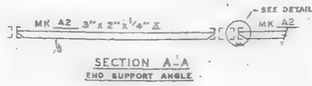


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE

DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
⚠	5-12-69	AS NOTED	GDC

REF DRWG.

7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-66
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

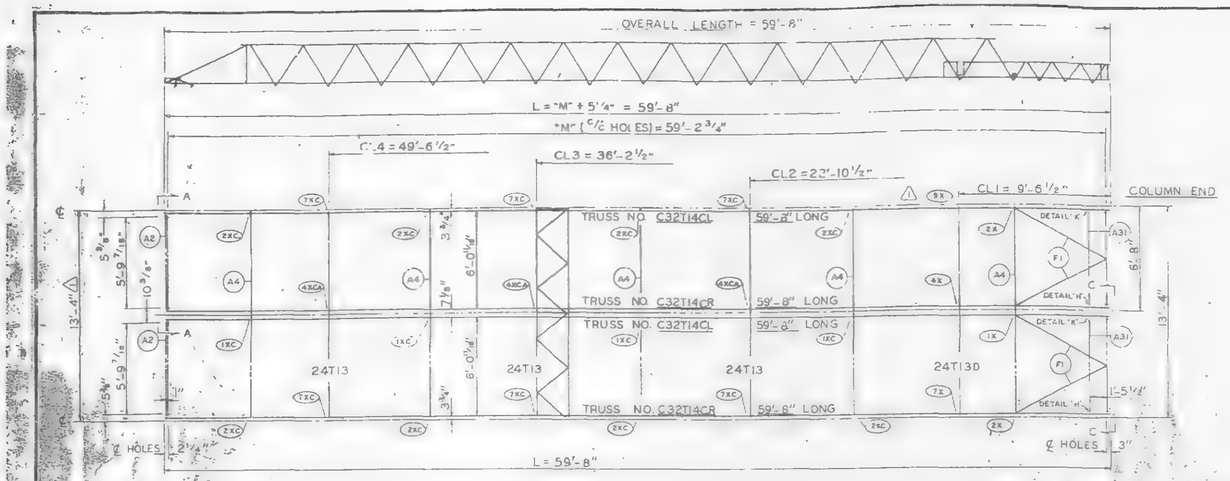
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 90 (NORTH)

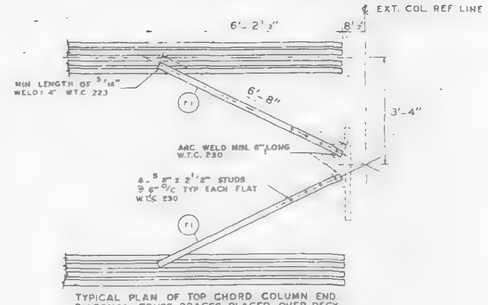
PANEL BR2B-13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY

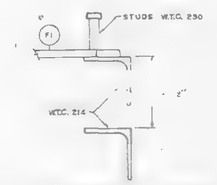
FABRICATED AT MADISON, ILLINOIS		DESIGN - DRAWING NO 7-AB3-27	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 6/12/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP BR2B



PANEL NO. BR2C SIZE 13'-4" x 59'-8"



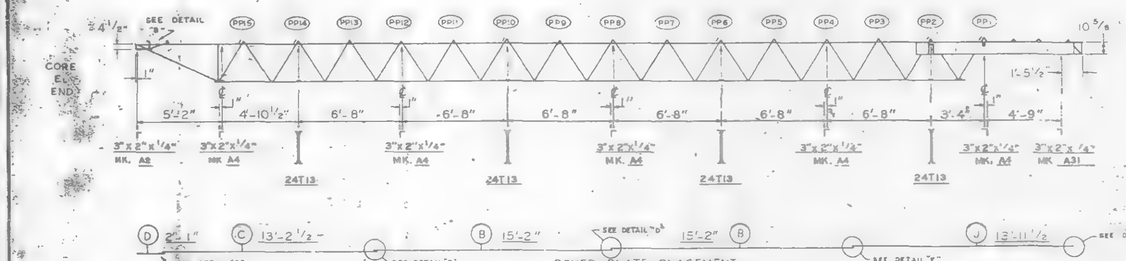
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

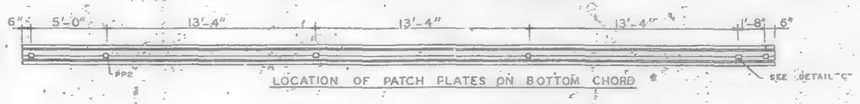
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	1	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x 1/4" x 5'-11 9/16"	ST 403
	A4	5	3"x2"x 1/4" x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4" x 5'-8 1/16"	ST 410
CLOSURE PLATES	PP11	2	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	4	1'-2" x 5 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x.0135" x 15'-2"	ST 303
	C	2	9"x.0135" x 13'-2 1/2"	ST 303
	D	2	9"x.0135" x 2'-1"	ST 303
	J	2	9"x.0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2" x .25" x 6"	ST 400
5/8 SHEAR ANCHOR	SA2	4	5/8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES ⚠	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	3	4 1/2" x .38" x 0'-9"	ST 400
	P3	3	4 1/2" x .38" x 1'-0"	ST 400
	P9	4	3" x 1/2" x 1'-3"	ST 409
	P10	1	4 1/2" x .38" x 0'-5"	ST 409
	P11	1	3" x 1/4" x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1'-4" FULL THROAT FILLET.

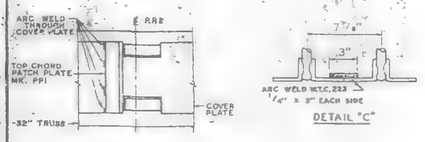


COVER PLATE PLACEMENT

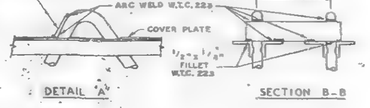
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

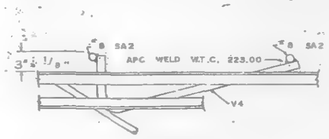


TOP VIEW-DETAIL "A"

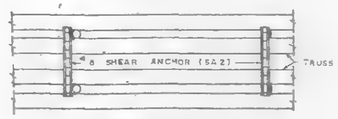


DETAIL "A" SECTION B-B

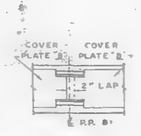
DETAIL "C"



DETAIL "B"



TOP VIEW DETAIL "B"

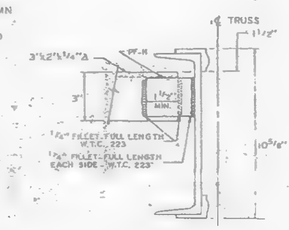


DETAIL "D"

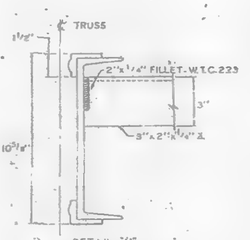
DETAIL "E"

DETAIL "F" DETAIL "G"

1 FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

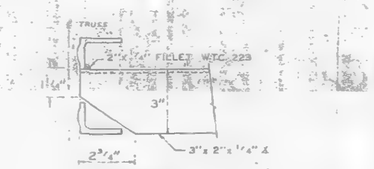


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

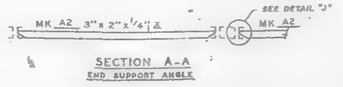


DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
	5-12-69	AS NOTED	GDC

REF DRWG.

7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SA-124	10-11-68
7-AB3-24	8-15-68

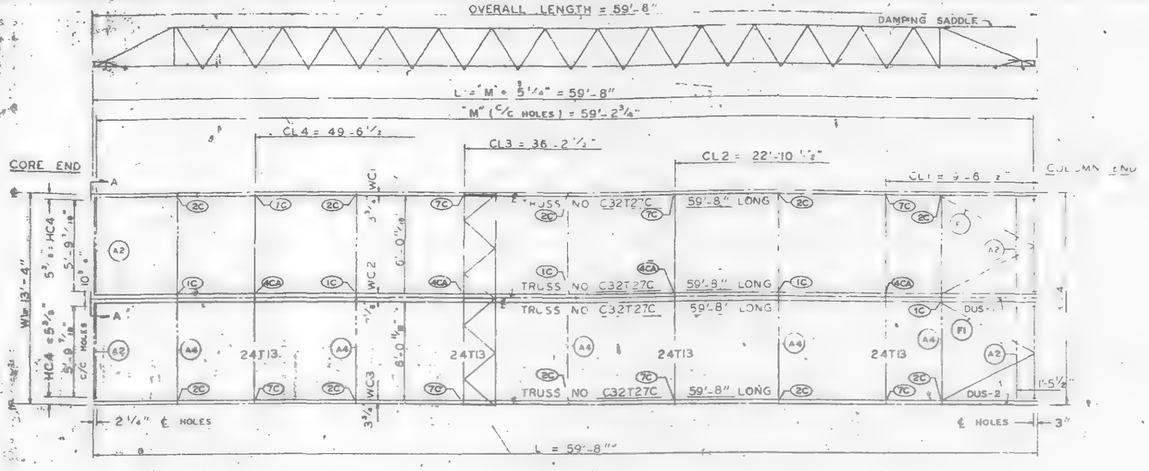
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

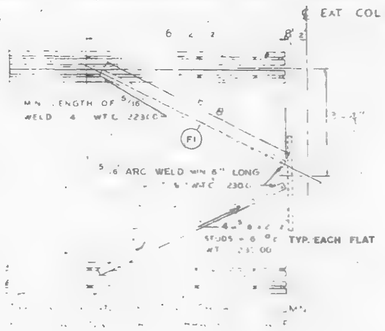
PANEL BR2C-13'-4" x 59'-8"

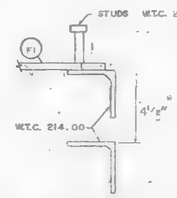
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-27	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY RWB DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.S. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP BR2C-1



PANEL NO: B3C SIZE 13'-4" x 59'-8"

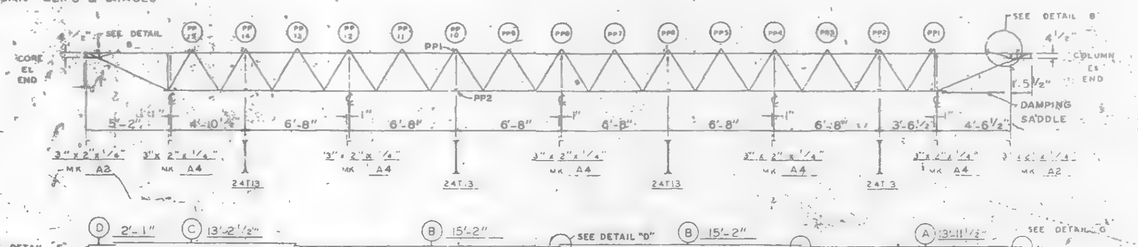


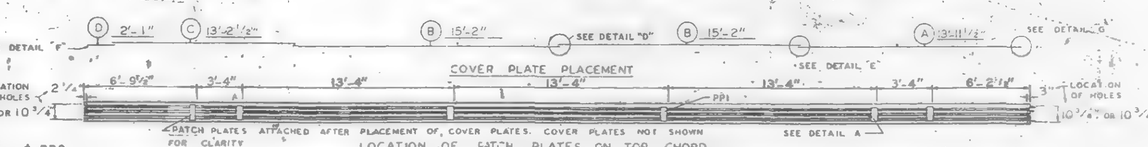


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T27C	4	C32T27C-59'-8"	ST227C
BRIDGING TRUSSES	T 3	4	24T13 13'-3"	BT213
3"x2"x1/4" ANGLE	A2	4	3"x2"x 6"x5'-11 9/16	ST402
	A4	5	3"x2"x 1'-8"x 13'-3"	ST402
DIAGONAL FLATS	F1	4	1'-2 1/2" x 8" x 6'-8"	ST402
PATCH PLATES	PP1	12	2"x 13"x 0'-9"	ST400
	PP2	12	3"x 8"x 0'-3"	ST400
COVER PLATES	A	2	6"x 0.135"x 13'-2 1/2"	ST303
	B	4	9"x .0135" x 15'-2"	ST303
	C	2	9"x .0135" x 13'-2 1/2"	ST303
	D	2	9"x .0135" x 2'-1"	ST303
ANGLE CLIPS	C1	16	2"x 1 1/2"x 1/4"x 0'-8"	ST 400
"B" SHEAR ANCHOR	SA2	8	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x3 1/2"x 3/8"x 3'-1 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/8 x 3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 2"x 8 1/2"	ST 400
	P2	4	4 1/2" x .36" x 0'-9"	ST 400
	P3	4	4 1/2" x .36" x 1'-0"	ST 400

W.C. & DIMENSION WC3 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

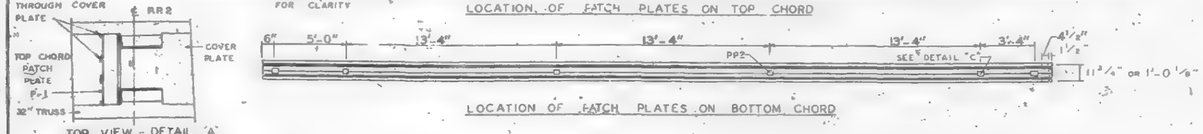




COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

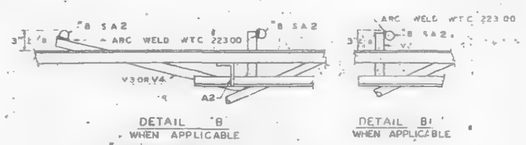


LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW - DETAIL "A"

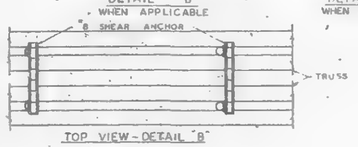
DETAIL "A" SECTION D-D

DETAIL "D" DETAIL "E"



DETAIL "B" WHEN APPLICABLE

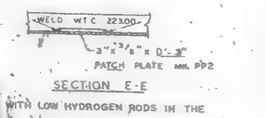
DETAIL B1 WHEN APPLICABLE



TOP VIEW - DETAIL "B"

COVER PLATES "29 GA THICK

DETAIL "C"



SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET

DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WT.C 223.00

SECTION A-A

END SUPPORT ANGLES

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

REF DRWG		
7 AB4 3		10-15-68
7-AB4	15 & 16	7-22-68
7-AB4	42	10-15-68
SA-124		1-6-69
7-AB3	43	1-6-69
7-AB1	24	1-6-69
7-AB2	6	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (SOUTH)
PANEL B3C - 13'-4" x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-43 PLATE

APPROVED FOR FABRICATION FOR PONYA — DATE 11/3/69

DRAWN BY — DATE APRIL 28, 1969

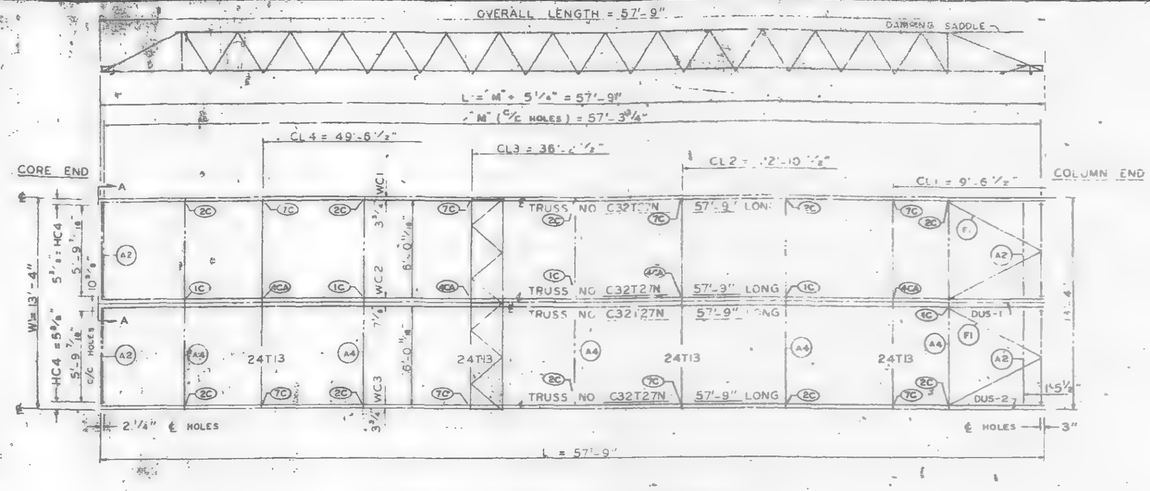
APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

CHECKED BY T.M. CHURA — DATE APRIL 28, 1969 — IN CHARGE OF PROD. DEV.

DETAILED BY J. C. WEBER

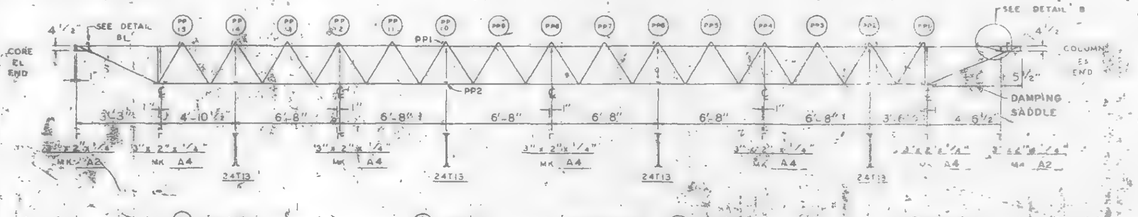
FABRICATION CONT. NO. W.T.C. 221

SHEET NO FP B3C



PANEL NO. B3N SIZE 13'-4" x 57'-9"

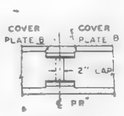
℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



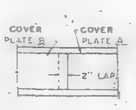
TOP VIEW - DETAIL 'A'

DETAIL 'A'

SECTION D-D

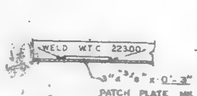


DETAIL 'D'



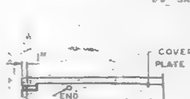
DETAIL 'E'

DETAIL 'C'

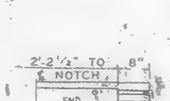


SECTION E-E

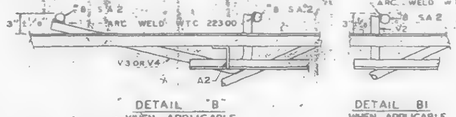
NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70, SERIES, OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



DETAIL 'F'

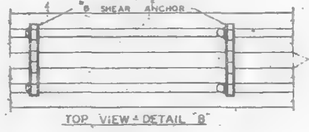


DETAIL 'G'



DETAIL 'B' WHEN APPLICABLE

DETAIL B1 WHEN APPLICABLE

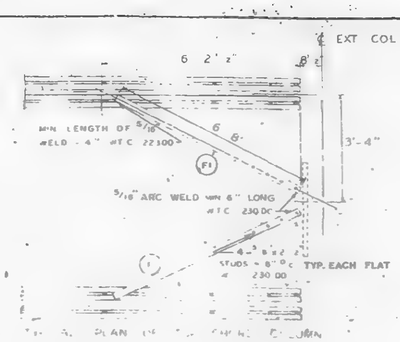


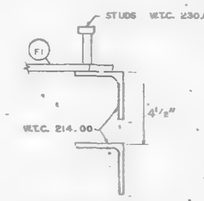
TOP VIEW - DETAIL 'B'

SECTION A-A
END SUPPORT ANGLES

DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT

NUMBERS AND LETTERS IN ELLIPSES i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T2-N	4	C32T2-N-57'-8"	ST201
BRIDGING TRUSSES	T13	4	24T13 - 13'-3"	BT213
3"x 2"x 1/4 ANGLE	A2	4	3"x 2"x 1/4 x 5'-11 9/16"	ST403
	A4	5	3"x 2"x 1/4 x 13'-3"	ST403
DIAGONAL FLATS	F1	4	1'-2" x 6" x 6'-8"	ST402
PATCH PLATES	PP1	12	2"x 1/4 x 0'-9"	ST402
	PP2	12	3" x 3/8 x 0'-3"	ST402
COVER PLATES	A	2	6" x 0.135" x 9'-2"	ST303
	B	4	9" x 0.135" x 15'-2"	ST303
	C	2	9" x 0.135" x 13'-2 1/2"	ST303
ANGLE CLIPS	C1	12	2"x 1 1/2"x 1/4"x 0'-8"	ST 400
7/8" SHEAR ANCHOR	SA2	8	7/8" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3 1/2"x 3 1/2"x 3/8"x 3'-1 7/8"	ST298
	DUS-2	1	3 1/2"x 3 1/2"x 3/8"x 3'-6 7/8"	ST268
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3 1/16" x 8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-8"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG

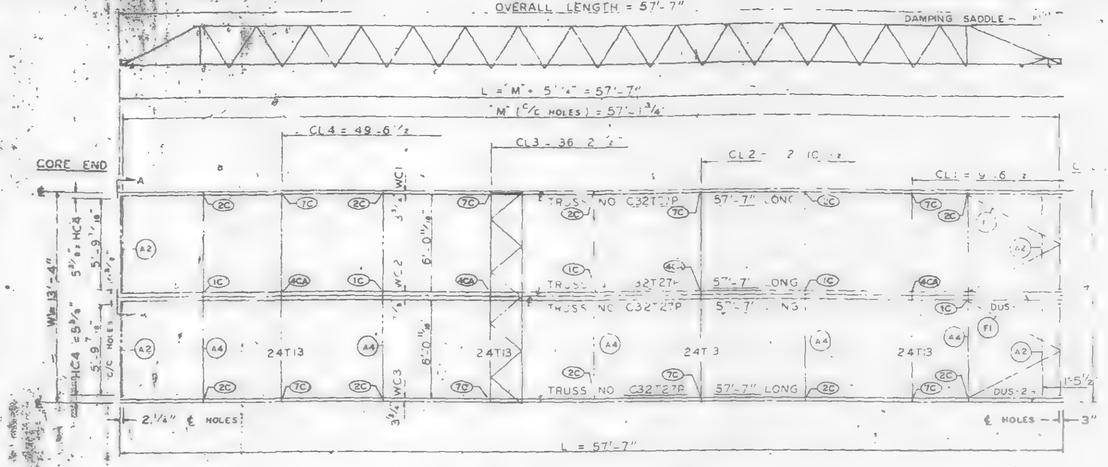
7-A64-3	10-15-68
7-AB4 15 & 16	7-22-68
7-AB4 42	10-15-68
SA-124	1-6-69
7-AB3-43	1-6-69
7-AB1-24	1-6-69
7-AB2-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 44 (EAST)

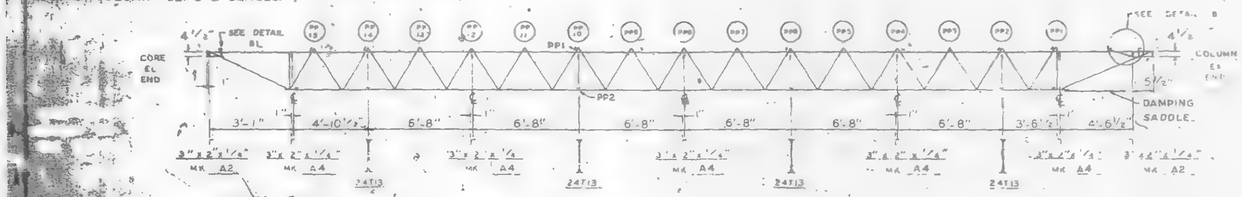
PANEL B3N - 13'-4" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-43	PLATE
APPROVED FOR FABRICATION BY ... FOR P.O.N.Y.A.	DATE 7/31/69	DRAWN BY ... DATE APR. 28, 1969	
APPROVED FOR FABRICATOR BY ... FOR FABRICATOR	DATE	CHECKED BY T.M. CHUNG DATE APRIL 28, 1969	IN CHARGE OF PROD. DIV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FD B3N



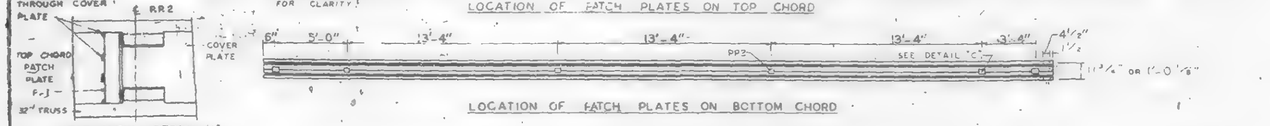
PANEL NO. B3P . SIZE 13'-4" x 57'-7"

℄ ℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



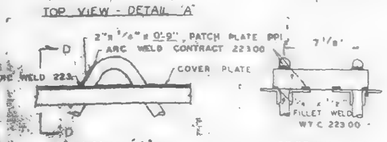
COVER PLATE PLACEMENT

LOCATION OF FATCH PLATES ON TOP CHORD



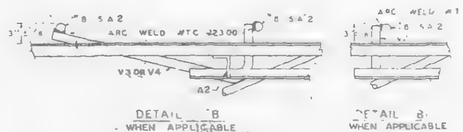
LOCATION OF FATCH PLATES ON BOTTOM CHORD

TOP VIEW - DETAIL 'A'



DETAIL 'A' SECTION D-D

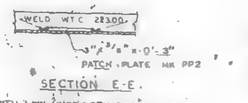
DETAIL 'D' DETAIL 'E'



TOP VIEW - DETAIL 'B'

DETAIL 'C'

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THICKNESS.

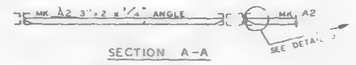


SECTION E-E

DETAIL 'F' DETAIL 'G'

COVER PLATES 28 GA THICK

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300



SECTION A-A
END SUPPORT ANGLES

DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T2P	4	C32T27P-57'-7"	ST 2P
	T13	4	24T13 L3 3	ST 213
	L2	5	3 1/2 x 4 x 5/16	ST 403
	A4	5	3 x 2 x 4 x 13 3	ST 403
		4	2 x 1/4 x 6'-8"	ST 402
FATCH PLATES	PP1	2	2 x 1/4 x 10'-9"	ST 400
	PP2	12	3 x 3/8 x 1'-0 3/4"	ST 400
COVER PLATES	A	4	9" x 0.135" x 5'-2"	ST 303
	B	4	9" x 0.135" x 5'-2"	ST 303
	C	2	9" x 0.135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	12	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
"B" SHEAR ANCHOR	SA2	8	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLES	DS1	1	3" x 3 1/2" x 3/8" x 3'-1 7/8"	ST 298
	DS2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 1/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	4	4 1/2" x .38" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

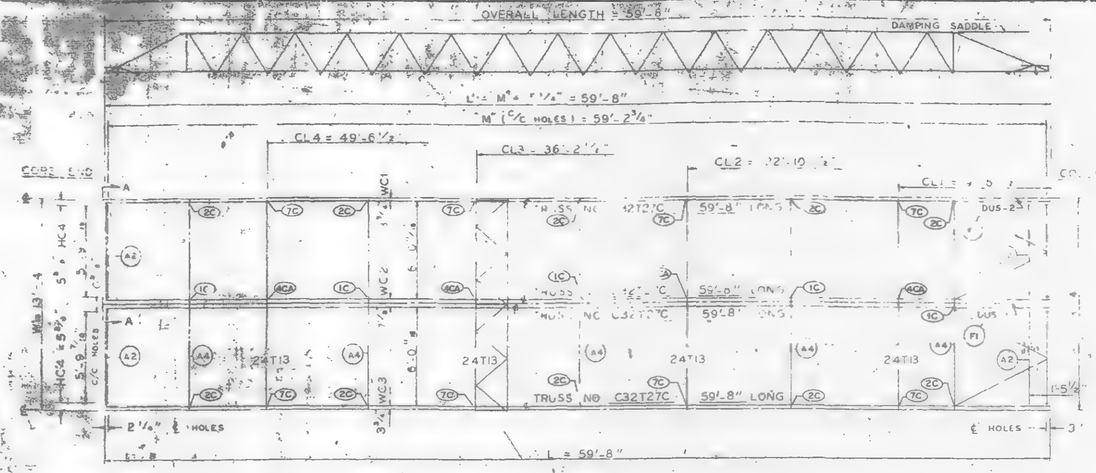
REF DRWG		
7-AB4 3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4 42	10-15-68
SA 24	1-6-69
7-AB3 43	1-6-69
7-AB 24	1-6-69
7-AB2-B	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 78 (NORTH)
PANEL B3P - 13'-4" x 57'-7"
BLDG. B FLOORS 78 (WEST)

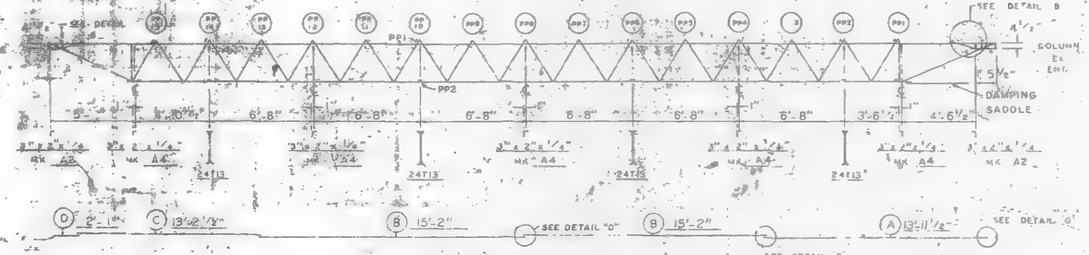
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7 AB3 43
PLATE
APPROVED FOR FABRICATION BY ... FOR P.O.N.Y.A. DATE 11/21/68
DRAWN BY Ruck DATE APRIL 24, 1968
APPROVED FOR FABRICATION BY ... FOR FABRICATOR DATE
CHECKED BY T.M. CHIJIWA DATE APRIL 28, 1968
IN CHARGE OF PROD. DEV.
DETAILED BY A.J. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO FP 8

LACLEDE STEEL CO.



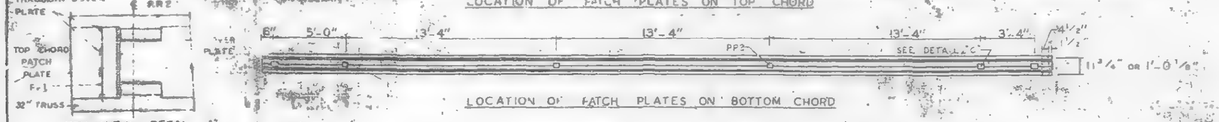
PANEL NO. BR3C SIZE 13'-4" x 59'-8"

℄ & DIMENSION MC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACKET



COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

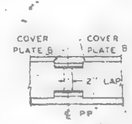


LOCATION OF PATCH PLATES ON BOTTOM CHORD

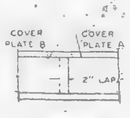
TOP VIEW - DETAIL "A"

DETAIL "A"

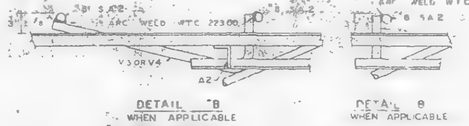
SECTION D-D



DETAIL "D"

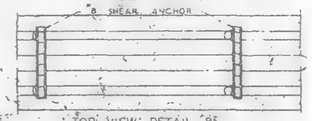


DETAIL "E"



DETAIL "B" WHEN APPLICABLE

DETAIL "B" WHEN APPLICABLE

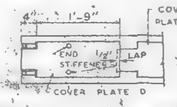


TOP VIEW - DETAIL "B"

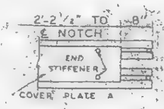
DETAIL "C"

SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE FULL THICKNESS FILLET



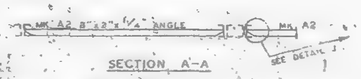
DETAIL "F"



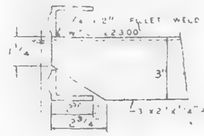
DETAIL "G"

COVER PLATES 20 GA THICK

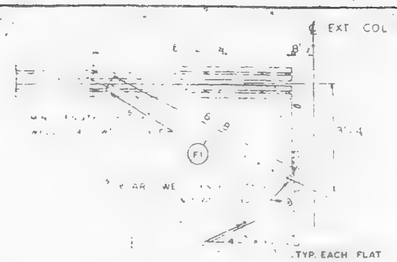
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300



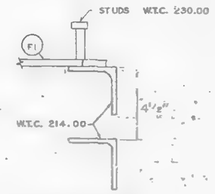
SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



OVER DECK BY WTC 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF DRWG
FLOOR TRUSSES	T2	4	C32T27C 59'-8"	ST2
	T3	4	[illegible]	ST 213
				ST 4
PATCH PLATES	PP1		[illegible]	
	PP2		[illegible]	
COVER PLATES	B	4	9"± x .0135" x 15'-2"	ST 303
	C	2	9"± x .0135" x 13'-2 1/2"	ST 303
	D	2	9"± x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	16	2" x 1'-2" x 1/4" x 0'-6"	ST 400
"B" SHEAR ANCHOR	SA2	8	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	1	3'-4" x 3 1/2" x 3/8" x 3'-3 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-0 7/8"	ST 298
CONNECTION BAR	CB1	4	1'-8" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 1/4" x 8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	4	4 1/2" x .39" x 1'-0"	ST 400

NUMBERS AND LETTERS IN ELLIPSES ie., (10), (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

REF DRWG		
[illegible]		10-15-68
[illegible]	S 6	7-22-68
[illegible]	42	10-15-68
SA [illegible]		6 68
7-ABJ-44		1-6-69
7-ABJ-24		1-6-69
7-ABJ-8		7-22-68

COVER PLATE DETAILS

[illegible] OF NEW YORK AUTHORITY

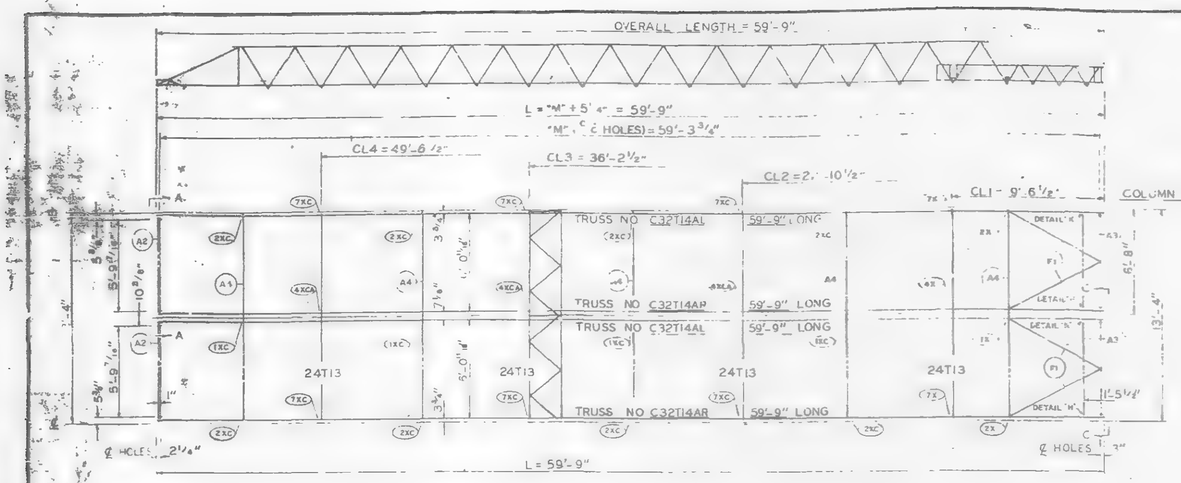
[illegible] 78 (SOUTH)

[illegible] BR3C 4" x [illegible]

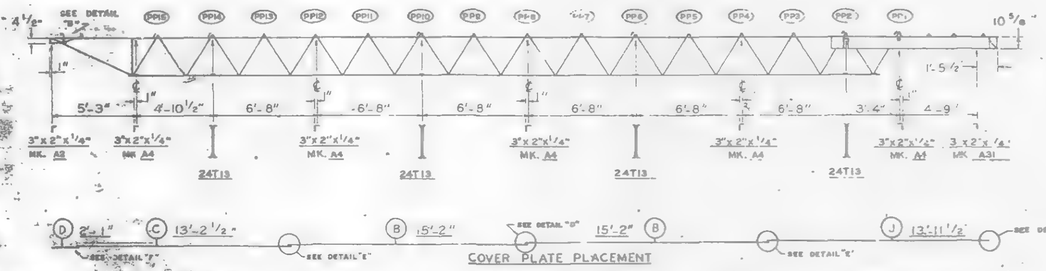
BLDG 8 FLOORS 78 (EAST)

FABRICATION BY ACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. ABJ-44	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 7/21/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FARRGATOR	DATE	CHECKED BY T.M. CHUNA DATE APRIL 28, 1969	IN CHARGE OF SHOP [illegible]
DETAILED BY A.C. WEBER	ACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. CD BR 3C

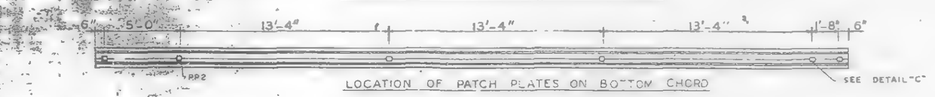


PANEL NO. BR7A SIZE 13'-4" x 59'-9"

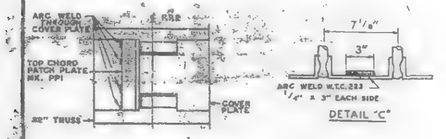


COVER PLATE PLACEMENT

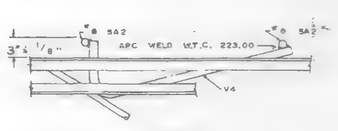
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



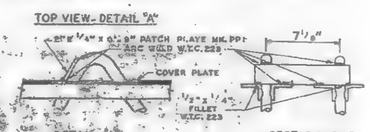
DETAIL "C"



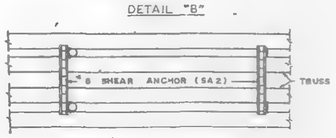
DETAIL "B"

DETAIL "D" DETAIL E

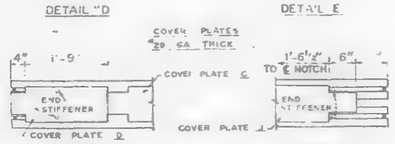
TOP VIEW - DETAIL "A"



DETAIL "A" SECTION B-B

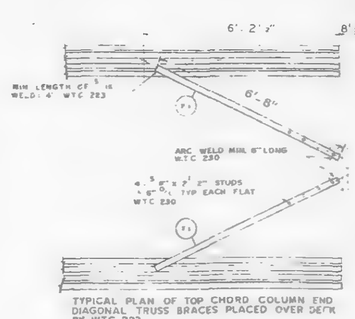


TOP VIEW DETAIL "B"

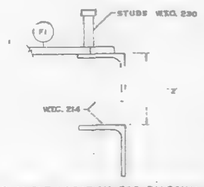


DETAIL "F" DETAIL G

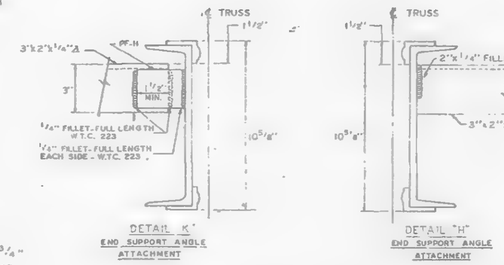
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



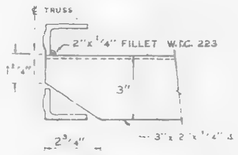
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



DETAIL K END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT

SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK.	THICK	SIZE	
FLOOR TRUSSES	T14AL	2	32T14AL x 59'-9"	T 214AL
	T14AR	2	32T14AR x 59'-9"	ST 214A
SPACER TUBES				
BRIDGING TRUSSES			24T13 x 13'-3"	ST 213
				ST 403
				ST 403
				ST 403
3"x2"x1/4" ANGLES				
CLIP ANGLES				ST 402
DIAGONAL FLATS			2 x 5 x 6	ST 402
PATCH PLATES			3 x 3/8 x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	9" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS		8	2" x 1 1/2" x 2" x .25" x 6"	ST 400
*8 SHEAR ANCHOR	SA2	4	*8 REBAR x 0'-9"	ST 400
CONNECTION BAR		5	*8 x 0'-3"	ST 400
CONNECTION PLATES				
		4	3 x 3 x 3" x 0'-6 1/2"	ST 400
		4	8" x 39" x 0'-9"	ST 400
		4	8" x 39" x 1'-0"	ST 400
		4	2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (J).
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 219.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 4" FULL THROAT FILLET.

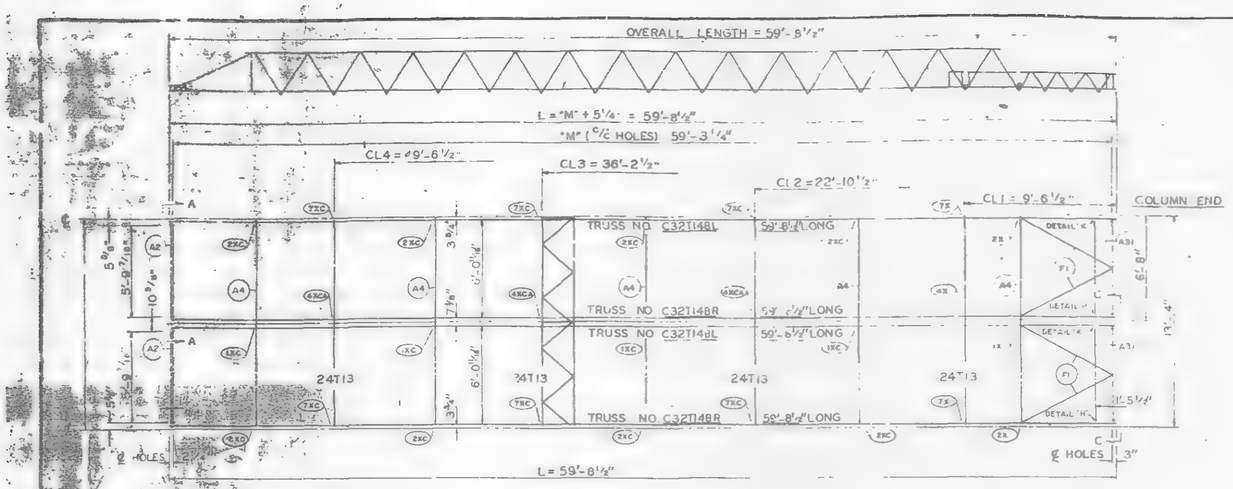
NO.	DATE	REVISION	BY

REF DRWG.

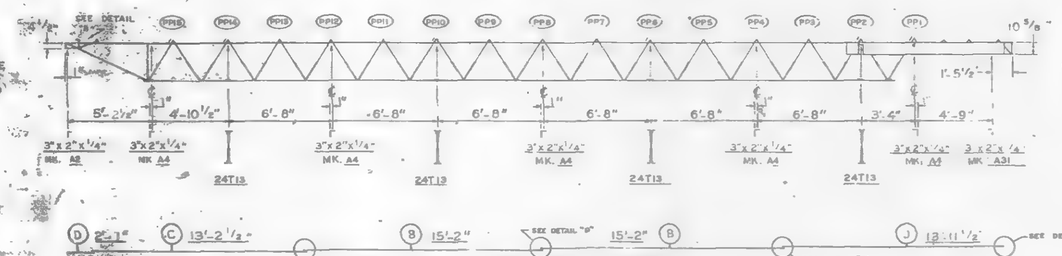
7-AB3-27	10-4-68
7-AB1-19	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
50-124	3-[illegible]-67
7-AB3-24	8-15-68

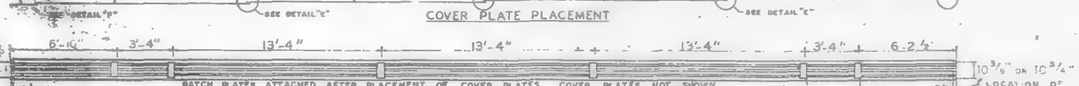
FLOOR PANEL DETAILS
FOR
[illegible]
THE [illegible] OF NEW YORK AUTHORITY
BLDG. 8 FLOORS [illegible]
PANEL BR7A - 13'-4" x 59'-9"

FABRICATION BY [illegible] STEEL EQUIPMENT		DESIGN DRAWING NO 7-AB3-27	PLATE
FABRICATED AT MADISON, ILL. NO'S		DRAWN BY [illegible]	
APPROVED FOR FABRICATION FOR PONTE [illegible]	DATE 6/16/69	DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.N. CHUBA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP BR7A



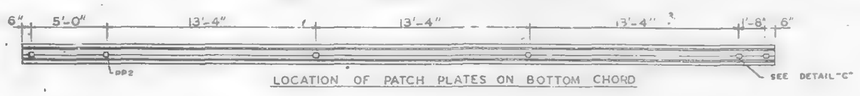
PANEL NO. BR78 SIZE 13'-4" x 59'-8 1/2"



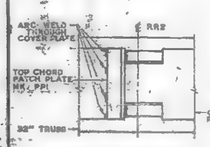


COVER PLATE PLACEMENT

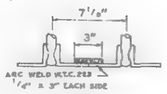
LOCATION OF PATCH PLATES ON TOP CHORD



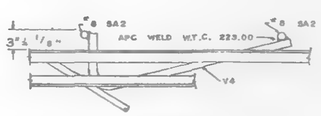
LOCATION OF PATCH PLATES ON BOTTOM CHORD



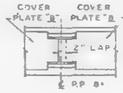
TOP VIEW - DETAIL "A"



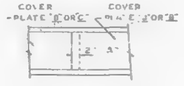
DETAIL "C"



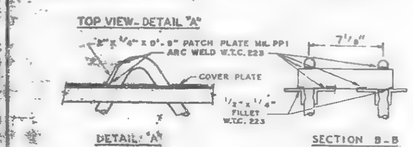
DETAIL "B"



DETAIL "D"

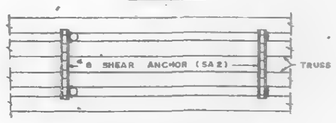


DETAIL "E"

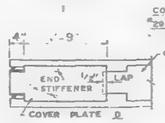


DETAIL "A"

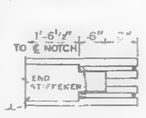
SECTION B-B



TOP VIEW DETAIL "B"

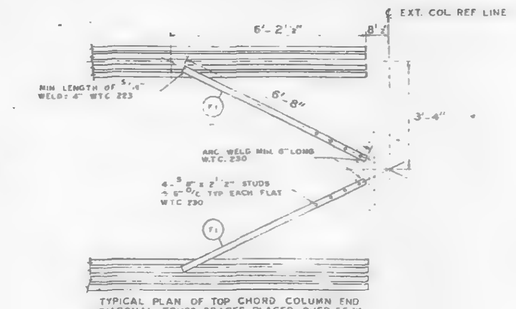


DETAIL "F"

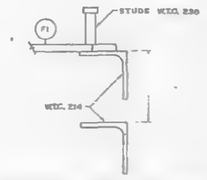


DETAIL G

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



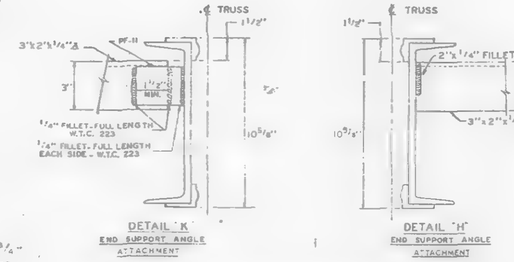
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

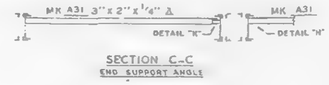
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL		PCS.	SIZE	DRWG
FLOOR TRUSSES	148L	2	C32T148L x 59'-8 1/2"	ST 2148L
	148R	2	C32T148R x 59'-8 1/2"	ST 2148R
BRIDGING TRUSSES		4	24T13 x 13'-3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3"x 2" x 4"-5'-11 1/2"	ST 403
	A4	4	3"x 2" x 4"-13'-3"	ST 403
	A31	2	3"x 2" x 4"-5'-8"	ST 410
CLOSURE PLATES	CP	2	3"x 1/4" x 0'-3 1/2"	ST 402
DIAGONAL FLATS	F	1	2" x 1/4" x 0'-6"	ST 402
PATCH PLATES	PP1	2	2" x 4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	2	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/2"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .01.5" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	18	2"x 1 1/2" x 2"x .25"x 6"	ST 400
"B SHEAR ANCHOR	SA2	4	"B REBAR x 0'-9"	ST 400
CONNECTION BAR	B1	2	1" x 3"	ST 400
CONNECTION PLATES	P1	4	3" 2"x 3" x 8"x 0'-6 1/2"	ST 400
	P2	4	4" 2" x .39"x 0'-9"	ST 400
	P3	4	4" 2" x .39"x 1'-0"	ST 400
	P9	4	3" x 1" 2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS (e.g. (K))
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 2.0 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.

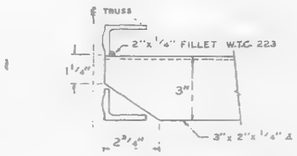


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY

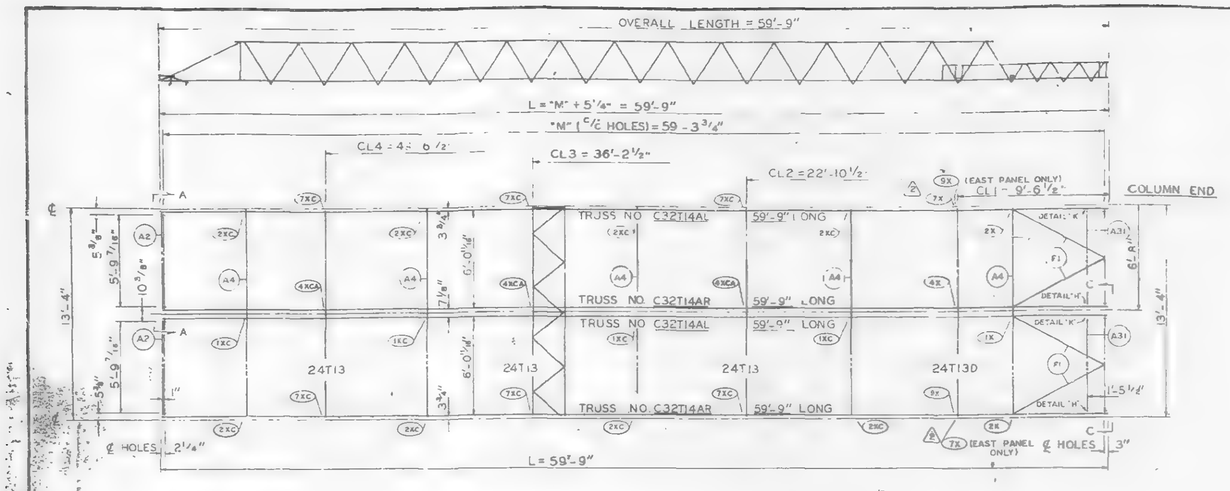
REF DRWG.	
7-AB3-27	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	3-24-69
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - 1 & 2
FOR
THE PORT OF NEW YORK AUTHORITY

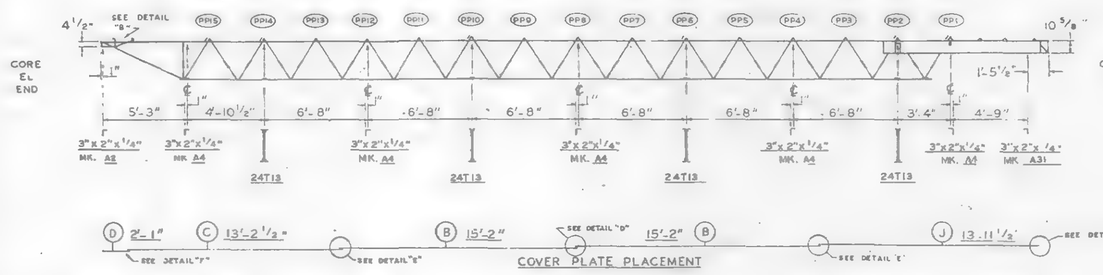
BLDG. 3 FLOORS 5 (WEST)

PANEL BR78-13'-4" x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-27
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 6/6/69
DRAWN BY [illegible] DATE MAY 8, 1969
CHECKED BY T.M. CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
FABRICATION CONT NO W.T.C. 221
SHEET NO FP BR78
DETAILED BY A.C. HEDEEN
TRACED BY [illegible]



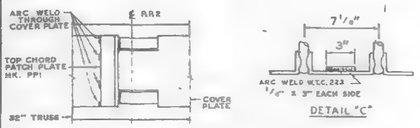
PANEL NO. B7A SIZE 13'-4" x 59'-9"

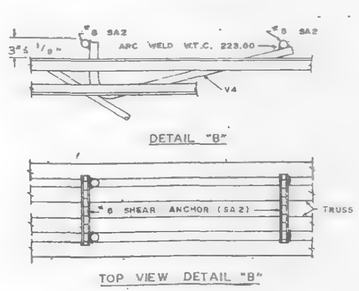


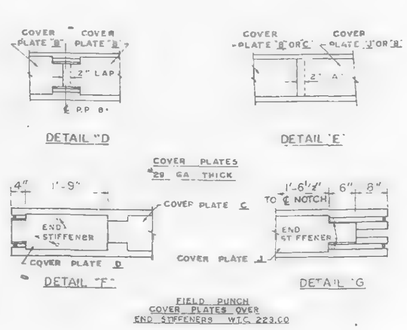
COVER PLATE PLACEMENT

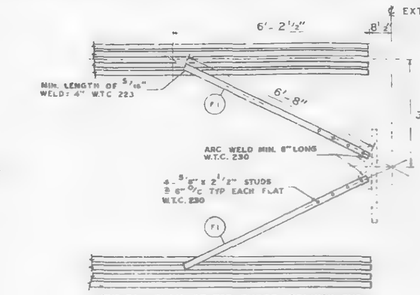
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

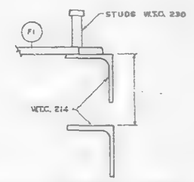








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

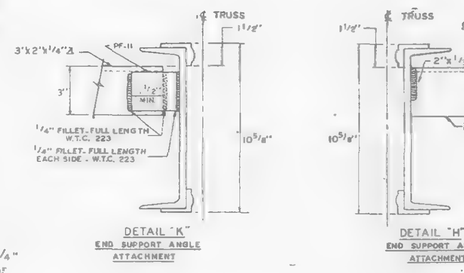


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

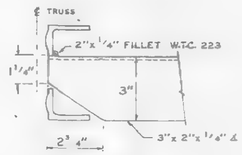
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG.
FLOOR TRUSSES	T14A	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	1	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2" x 1/4" ANGLE	A2	2	3"x2"x1'-6"x 5'-11 5/16"	ST 403
	A4	5	3"x2"x1'-6"x13'-3"	ST 403
	A31	2	3"x2"x1'-6"x5'-8 1/8"	ST 410
CLOSURE PLATES	PF-1	-	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1'-2" x 3 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/8"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 8"	ST 400
"8 SHEAR ANCHOR	SA2	4	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	"8 x 1'-3"	ST 400
CONNECTION PLATES (2)	P1	4	3 1/2" x 3 1/8" x 0'-8 1/2"	ST 400
	P2	3/4	4 1/2" x .39" x 0'-9"	ST 400
	P3	3/4	4 1/2" x .39" x 1'-0"	ST 400
	P9	4	3" x 1 1/2" x 1'-2"	ST 409
(1)	P10	1*	4 1/2" x .39" x 0'-5"	ST 409
	P11	1*	3" x 1 1/4" x 0'-5"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

(2) MATERIAL MARKED (*) IS FOR WEST PANELS ONLY.



SECTION C-C
END SUPPORT ANGLE



END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
(2)	6-13-69	AS NOTED	G.D.C
1	5-12-69	AS NOTED	G.G.L.

REF DRWG.

7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
SB-124	3-24-69
7-AB3-24	8-15-68

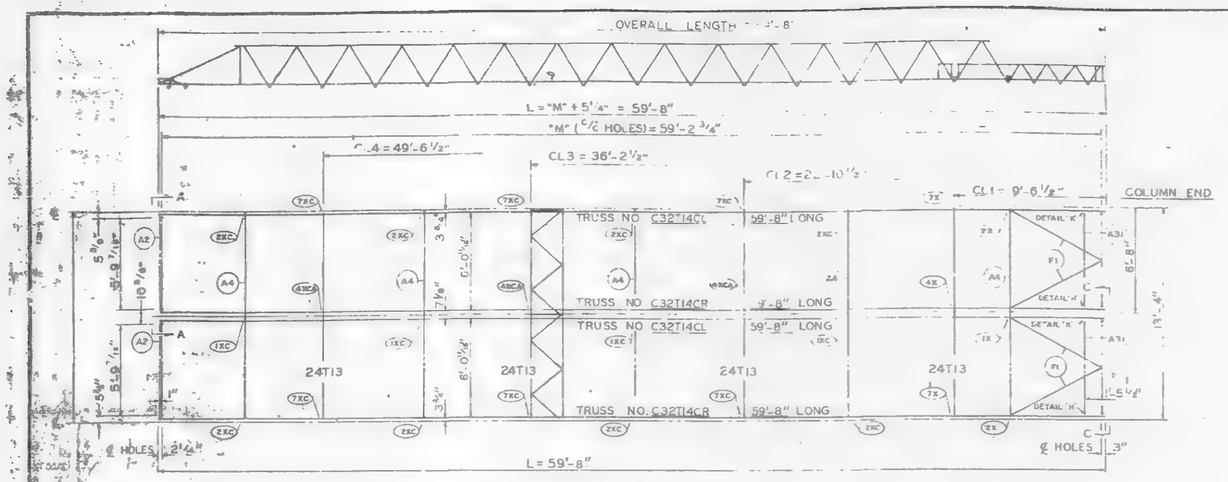
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 25 (EAST & WEST) 59 (WEST)

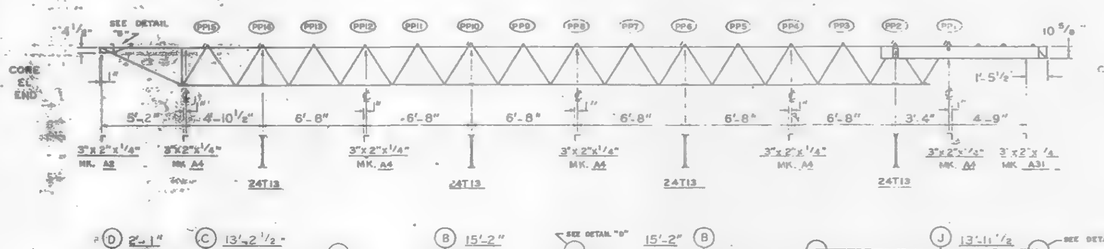
PANEL B7A-13'-4" x 59'-9"

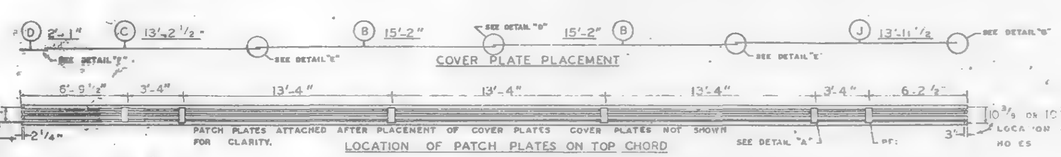
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-26	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 6/20/69	DRAWN BY [illegible] DATE MAY 6, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE MAY 6, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP B7A

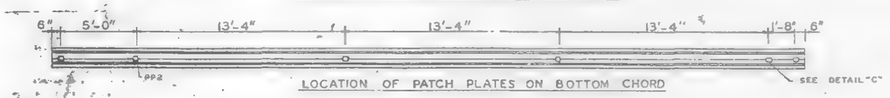


PANEL NO. BR7C SIZE 13'-4" x 59'-8"

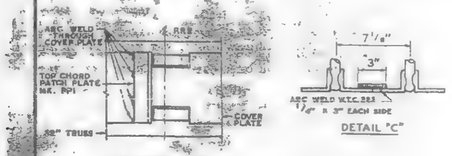


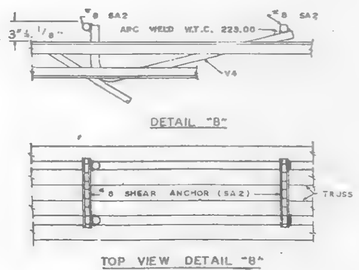


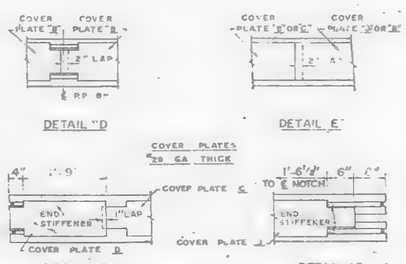
LOCATION OF PATCH PLATES ON TOP CHORD

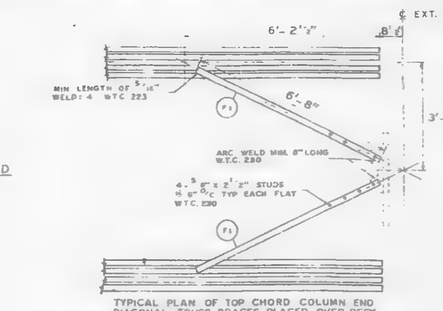


LOCATION OF PATCH PLATES ON BOTTOM CHORD

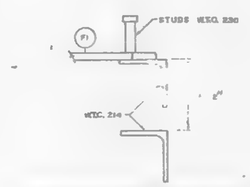








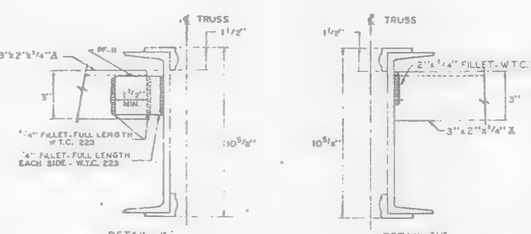
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



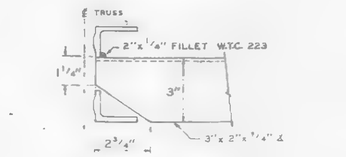
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

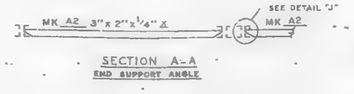
REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T14CL	2	C 32T14CL x 59'-8"	ST 214CL
	T14CR	2	C 32T14CR x 59'-6"	ST 214CL
BRIDGING TRUSSES	T	4	24T13 x 13'-3"	ST 213
3"x 2"x 1/4" ANGLE	A2	2	3"x 2"x 1/4" x 5'-11 15/16"	ST 403
	A4	5	3"x 2"x 1/4" x 13'-3"	ST 403
	A31	2	3"x 2"x 1/4" x 5'-8 7/8"	ST 410
CLOSURE PLATES	CP1	2	1/4" x 6" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	4	1/4" x 3 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	4	2 1/4" x 6" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 15'-2"	ST 303
	C	2	8" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x 2" x .25" x 8"	ST 400
"8 SHEAR ANCHOR	SA2	4	"8 REBAR x 0'-8"	ST 400
CONNECTION BAR	B1	4	1" x 6" x 1'-4"	ST 400
CONNECTION PLATES	P1	4	3" x 2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4" x 2" x .38" x 0'-9"	ST 400
	P3	4	4" x 2" x .38" x 1'-0"	ST 400
	P8	4	3" x 2" x 1/4" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (A).
ALL CONNECTION DETAILS FOR FLOORS 25, A9 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 228.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 4" FULL THROAT FILLET.



SECTION C-C
END SUPPORT ANGLE





SECTION A-A
END SUPPORT ANGLE

NO	DATE	REVISION	BY

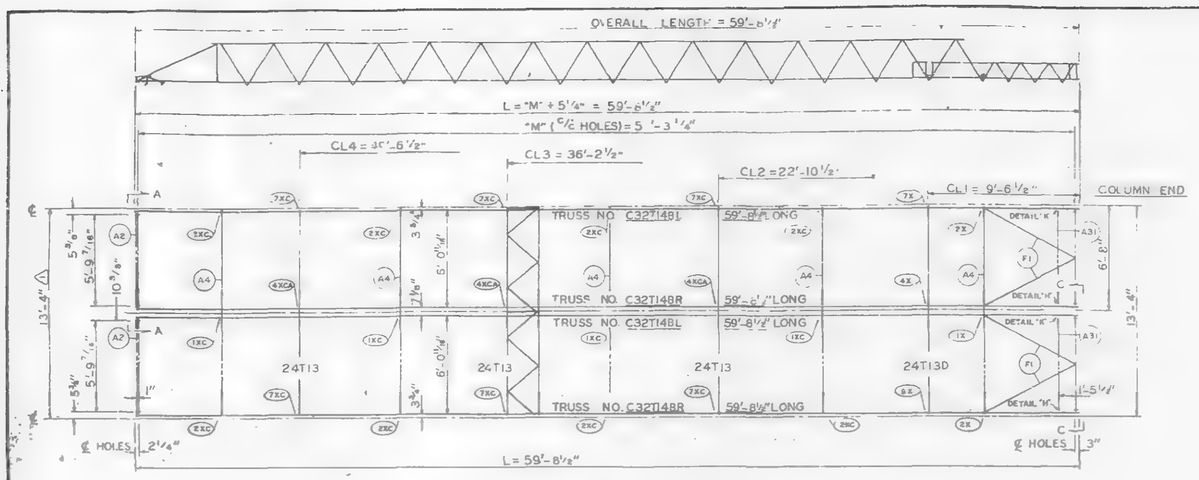
REF. DRWG.		
7-AB3-2"	10-4-68
7-A31-13	10-4-68
7-A5-8	7-22-68
7-AB4-26	7-22-68
58-124	3-24-69
7-AB3-24	8-15-68

FLOOR PANEL DETAILS
FOR
A.T.&.T. TRADE CENTER BUILDING
FOR
THE PORT OF NEW YORK AUTHORITY

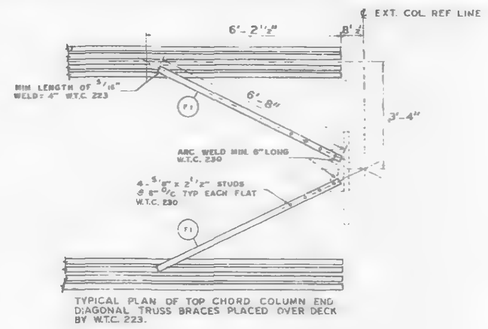
BLDG. 8 FLOORS 59 & 92 EAST)

PANEL BR7C-13'-4" x 59'-8"

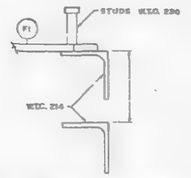
FABRICATED BY LONDEE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-2"	PLATE
APPROVED FOR FABRICATION WTC FOR PONYA	DATE 6/6/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE	CHECKED BY T.M. CHUMA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. -221	SHEET NO FP BR7C-1



PANEL NO. B7B SIZE 13'-4" x 59'-8 1/2"



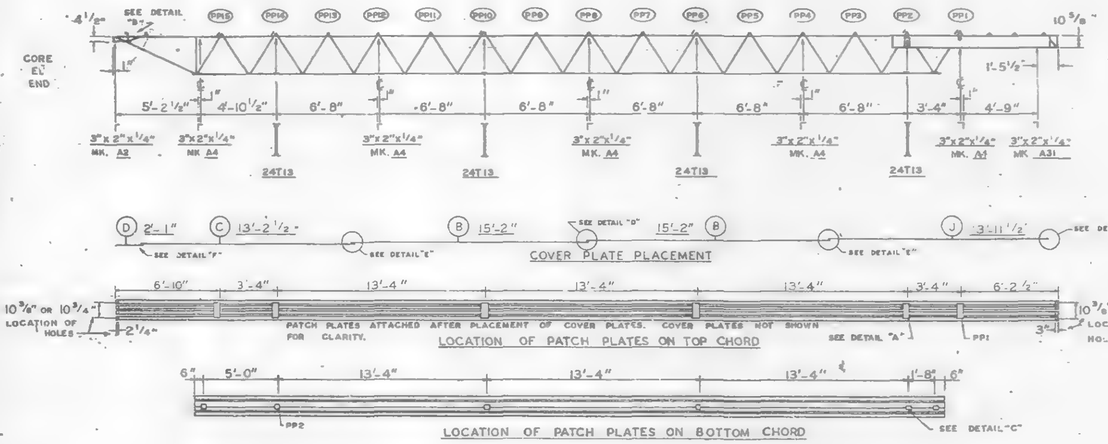
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

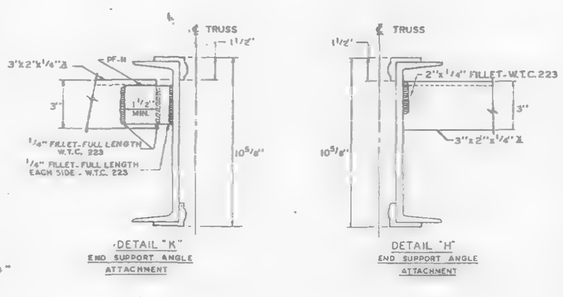


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T148L	2	C32T148L x 59'-8 2"	ST 2148L
	T148R	2	C32T148R x 59'-8 2"	ST 2148L
BRIDGING TRUSSES	T13	1	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x 4"x 5'-11 5/8"	ST 403
	A4	5	3"x2"x 4"x 3'-3"	ST 403
	A31	2	3"x2"x 4"x5'-8 6"	ST 410
CLOSURE PLATES	PF11	2	3"x 1/4" x 0'-2 3/8"	ST 402
DIAGONAL FLATS	F1	4	1'-2" x 5'-8" x 6'-8"	ST 402
PATCH PLATES	PP1	2	2"x 1/4" x 0'-9"	ST 400
	PP2	12	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135" x 15'-2"	ST 303
	C	2	9"x .0135" x 13'-2 1/8"	ST 303
	D	2	9"x .0135" x 2'-1"	ST 303
	J	2	9"x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	18	2"x 1 1/2"x .25"x 6"	ST 400
*8 SHEAR ANCHOR	SA2	4	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2"x 3 7/8"x 0'-8 1/2"	ST 400
	P2	3	4 1/2"x .39"x 0'-9"	ST 400
	P3	3	4 1/2"x .39"x 1'-0"	ST 400
	P8	4	3"x 1/2"x 1'-2"	ST 409
⚠1	P10	1	4 1/2"x .39"x 0'-5"	ST 409
	P11	1	3"x 1/4"x 0'-6"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (D)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 62 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

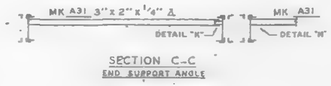




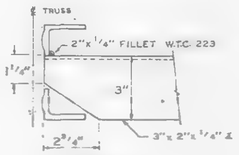
NO.	DATE	REVISION	BY
	5-12-69	AS NOTED	GD

REF DRWG.

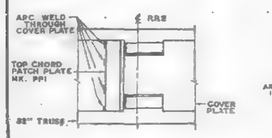
7-AB3-26	10-4-68
7-AB1-13	10-4-68
7-AB2-8	7-22-68
7-AB4-28	7-22-68
58-124	3-24-69
7-AB3-24	8-15-68



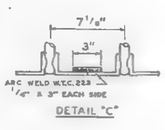
SECTION C-C
END SUPPORT ANGLE



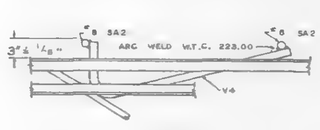
DETAIL "J"
END SUPPOAT ANGLE ATTACHMENT



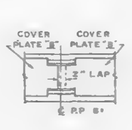
TOP VIEW - DETAIL "A"



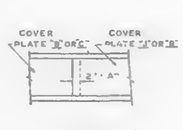
DETAIL "C"



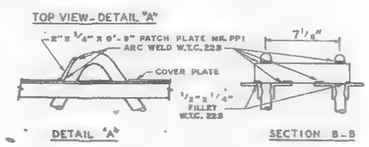
DETAIL "B"



DETAIL "D"

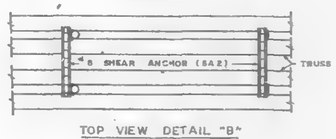


DETAIL "E"

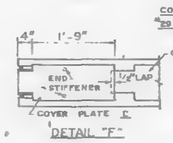


DETAIL "A"

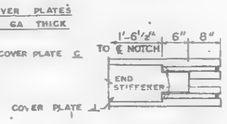
SECTION B-B



TOP VIEW DETAIL "B"



DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

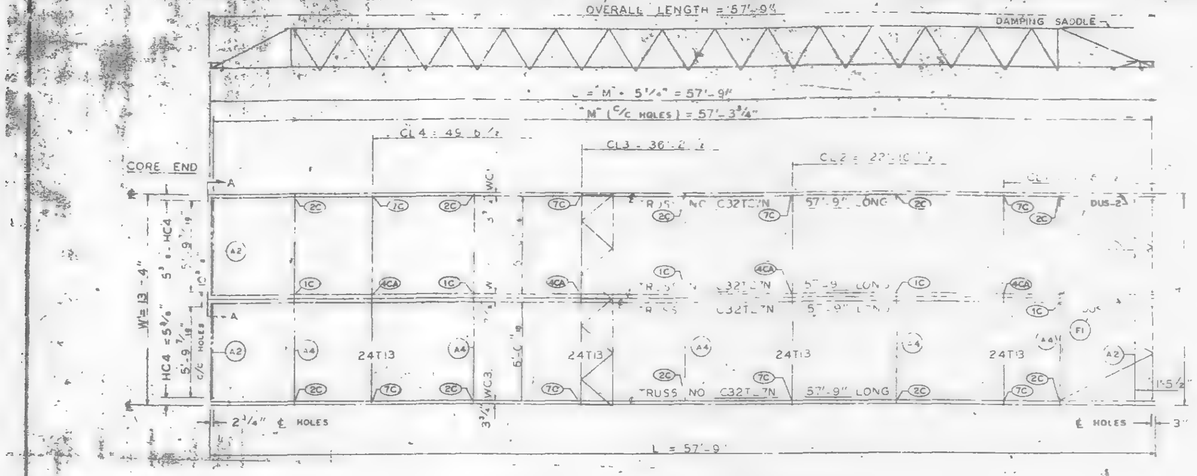
SECTION A-A
END SUPPORT ANGLE

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 9C (WEST)

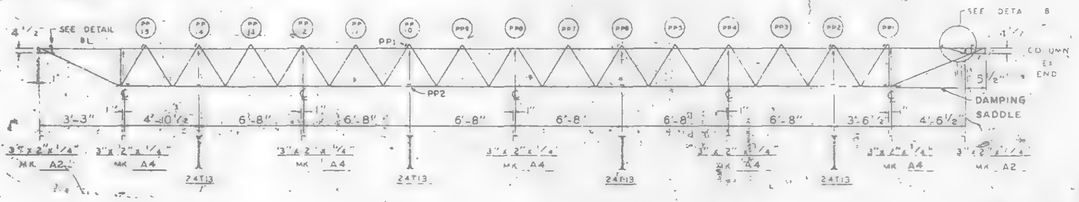
PANEL B7B - 13'-4" x 59'-8 1/2"

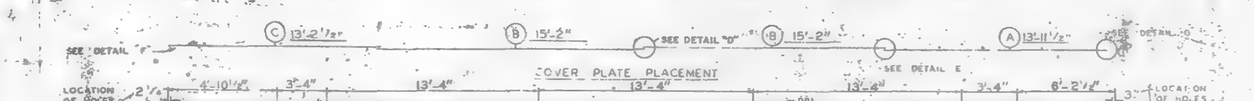
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-26 PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 6/6/69	DRAWN BY LwR DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE MAY 8, 1969
DETAILED BY A.C. MEEK		FABRICATION CONT NO W.T.C. 221
		IN CHARGE OF PROD. DEV.
		SHEET NO FP B7B



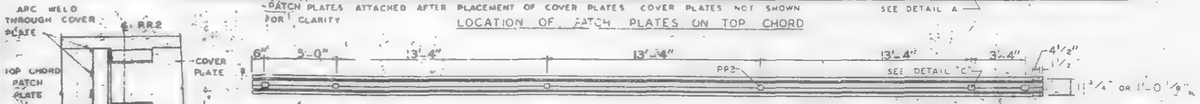
PANEL NO. BR3N SIZE 13'-4" x 57'-9"

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



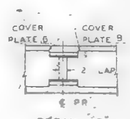


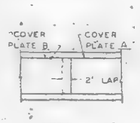
LOCATION OF PATCH PLATES ON TOP CHORD

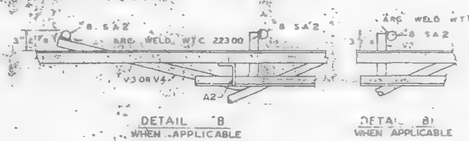


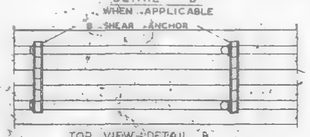
LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP VIEW - DETAIL 'A'

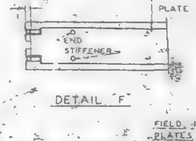


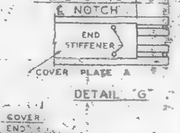




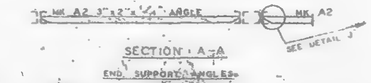


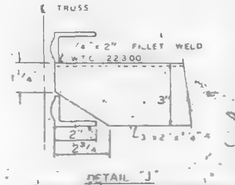
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.
A = 1/4"
B = 1/4"

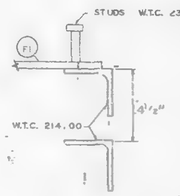




FIELD PUNCH COVER PLATES OVER END STIFFENERS W.C. 223.00







CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES ie., (4C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	REF DRWG
TOP CHORD PLATE	B	2	9" x 0.135 x 13-2"	ST3D3
	C	2	9 x 0.135" x 13-2"	ST3U3
ANGLES		12	3" x 3" x 1/4" x 0'-8"	ST 400
3/8" SHEAR ANCHOR	A2	8	3/8 REBAR x 0'-9	ST 400
DAMPING SADDLE	DS1	1	3" x 3" x 3/16" x 5 7/8"	ST298
	DUS-2	1	3" x 3" x 3/16 x 3 7/8"	ST298
CONNECTION BAR	CB1	4	1/2" x 1'-3"	ST 400
		6		
CONNECTION PLATES	P1	8	3 1/2" x 3'-6" x 6 1/2"	ST 400
	P2	4	4 1/2" x .30" x 0'-6"	ST 400
	P3	4	4 1/2" x .39" x 1'-0	ST 400

NO	DATE	REVISION	BY

REF DRWG

7-AB4-44	10-15-68
7-AB4-46	7-24-68
7-AB4-48	10-15-68
SA-124	1-6-69
7-AB3-44	1-6-69
7-AB1-24	1-6-69
7-AB6-8	7-22-68

FLOOR PANEL DETAILS

WORLD TRADE CENTER

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG B FLOORS 44 (EAST)

PANEL BR3N - 4" x 57-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-44

PLATE

APPROVED FOR FABRICATION BY [illegible] FOR PONTA — DATE 7/31/69

DRAWN BY [illegible] DATE [illegible]

APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

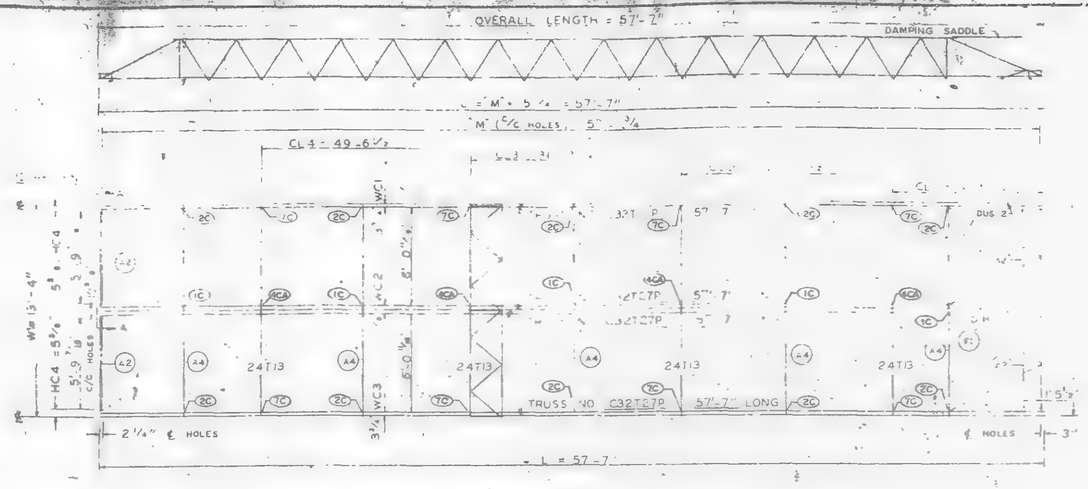
CHECKED BY T.M. CHIRA DATE APRIL 15 1969

IN CHARGE OF PROD. DEV.

LACLEDE STEEL CO. DETAILING BY [illegible]

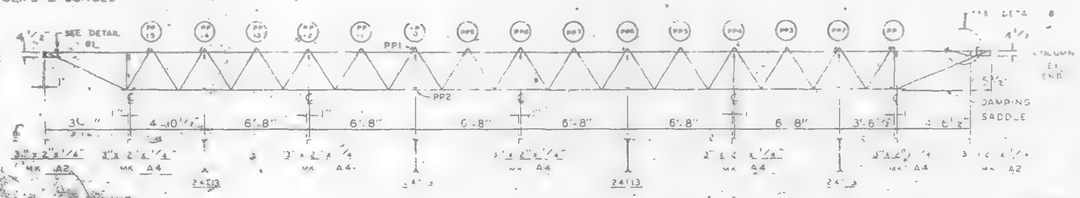
FABRICATION CONT. NO. W.T.C. 221

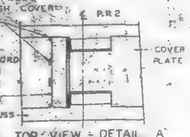
SHEET NO. FD BR3N



PANEL NO. BR3P SIZE 13'-4" x 57'-7"

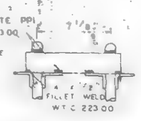
℄ ℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES



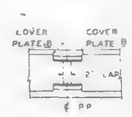


TOP VIEW - DETAIL A

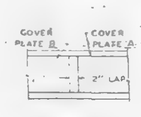
DETAIL "A"



SECTION D-D



DETAIL "C"



DETAIL "E"

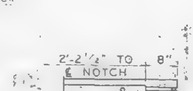
DETAIL "C"

SECTION E-E

NOTE: ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE ... SERIES OR EQUAL.

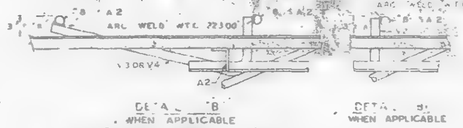
UNLESS ALL CONNECTION ARC WELDS SHALL BE ... FULL THROAT

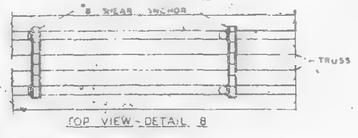
DETAIL "F"



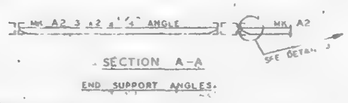
DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300

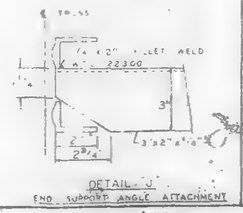




TOP VIEW - DETAIL B



SECTION A-A
END SUPPORT ANGLES



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ℄ ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF. DWG.
[illegible]	[illegible]	4	[illegible]	ST4[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	24T13 [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	B	4	9 x .135 x 15'-2"	ST303
[illegible]	F	2	5 x .035" x 13'-2 1/2"	ST303
[illegible]	[illegible]	12	2" x 1" 2"x1 1/4" x 0'-8"	ST 400
[illegible]	[illegible]	2, 8	8 REBAR x 0'-9"	ST 400
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	3" x 3" x 3/8" x 3'-0"	T298
CONNECTION BAR	CB1	9	A1 3"	ST 400
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 8 1/2"	ST 400
	P2	4	4 1/2" x .90" x 0'-8"	ST 400
	P3	4	4" 2" x .30" x 1' [illegible]	ST 400

NUMBERS AND LETTERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 OR CD 202.

NO.	DATE	REVISION	BY

DRWG.	DATE
[illegible]	10-15-68
[illegible]	7-22-68
[illegible]	10-15-68
[illegible]	1-6-69
[illegible]	1-6-69
[illegible]	1-6-69
[illegible]	7-22-68

[illegible] PANEL DETAILS

[illegible] CENTER [illegible]

FOR

THE [illegible] OF NEW YORK [illegible]

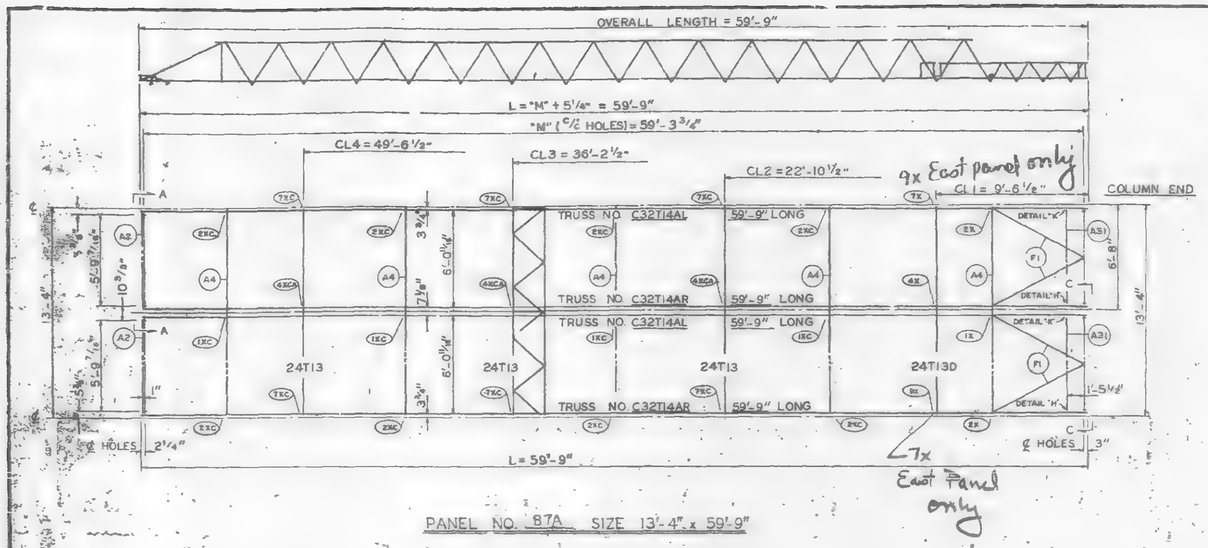
BLDG. A FLOORS 7E (NORTH)

PANEL BR3P 13'-4" x 57'-7"

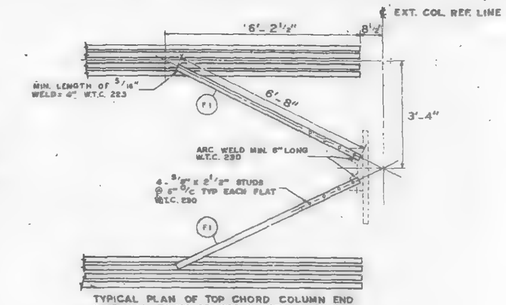
BLDG. B FLOORS 7B (WEST)

FABRICATION BY ACLEDE STEEL COMPANY

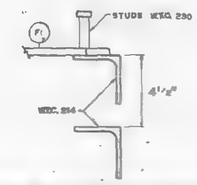
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. [illegible]	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONTA	DATE 4/26/68	DRAWN BY [illegible] DATE APRIL 26, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATION	DATE	CHECKED BY T.M.C.-[illegible] DATE APRIL 26, 1968	IN CHARGE OF SHOP DRW.
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FOR BP



PANEL NO. B7A SIZE 13'-4" x 59'-9"



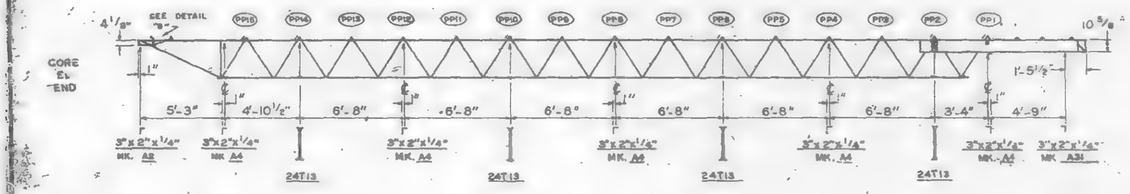
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

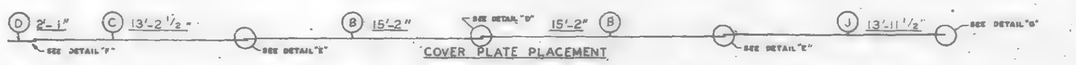


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	2	C32T14AL x 59'-9"	ST 214AL
	T14AR	2	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1/4"x 8'-11 3/4"	ST 403
	A4	5	3"x2"x1/4"x13'-3"	ST 403
	A31	2	3"x2"x1/4"x5'-8 1/2"	ST 410
CLOSURE PLATES	PF-11	2	3" x 1/4" x 0'-2 7/8"	ST 412
DIAGONAL FLATS	F1	4	1'-2" x 8 1/2" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	5" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	5" x .0135" x 15'-2"	ST 303
	C	2	6" x .0135" x 14'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	16	2" x 1 1/2" x .25" x 3"	ST 406
#8 SHEAR ANCHOR	SA2	~	#8 REBAR x 0'-9"	ST 406
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES*	P1	4	3 1/2" x 3" x 8" x 0'-6 1/2"	ST 400
	P2	3* 4	4 1/2" x .36" x 1'-0"	ST 400
	P3	3* 4	4 1/2" x .36" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 400
⚠	P10	1*	4 1/2" x .39" x 0'-5"	ST 400
	P11	1*	3" x 1/2" x 0'-6"	ST 400

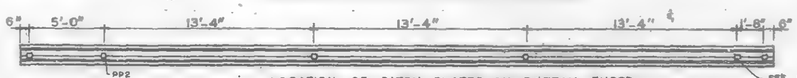
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (13).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 AS SHOWN ON SHEETS CD 210 THRU CD 220.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



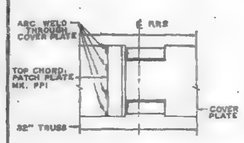


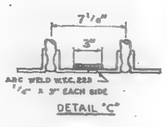
COVER PLATE PLACEMENT

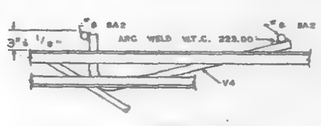
LOCATION OF PATCH PLATES ON TOP CHORD

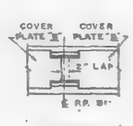


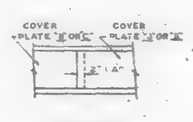
LOCATION OF PATCH PLATES ON BOTTOM CHORD

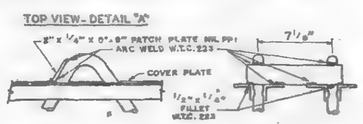


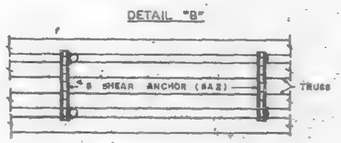


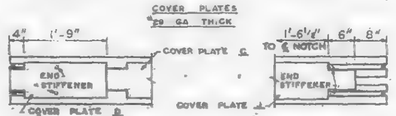


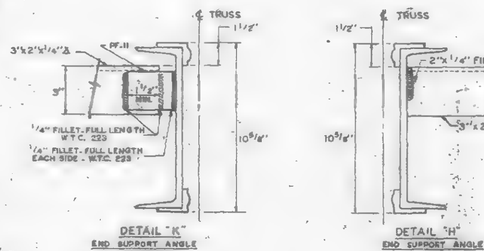


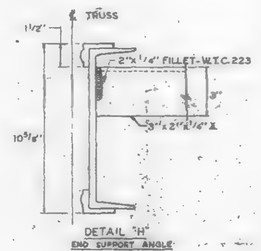




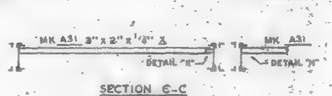




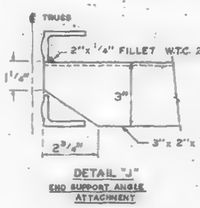




Material marked * is for West panel only



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
⚠	5-12-69	AS NOTED	G.A.

SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
☐ APPROVED
☒ APPROVED, AS NOTED
☐ RESUBMIT
☐ REJECTED
Date 6/6/69 By SK

REF DRWG.

7-A83-26	10-4-68
7-A81-13	10-4-68
7-A82-8	7-22-68
7-A84-28	7-22-68
SB-124	3-24-68
7-A83-24	8-15-68

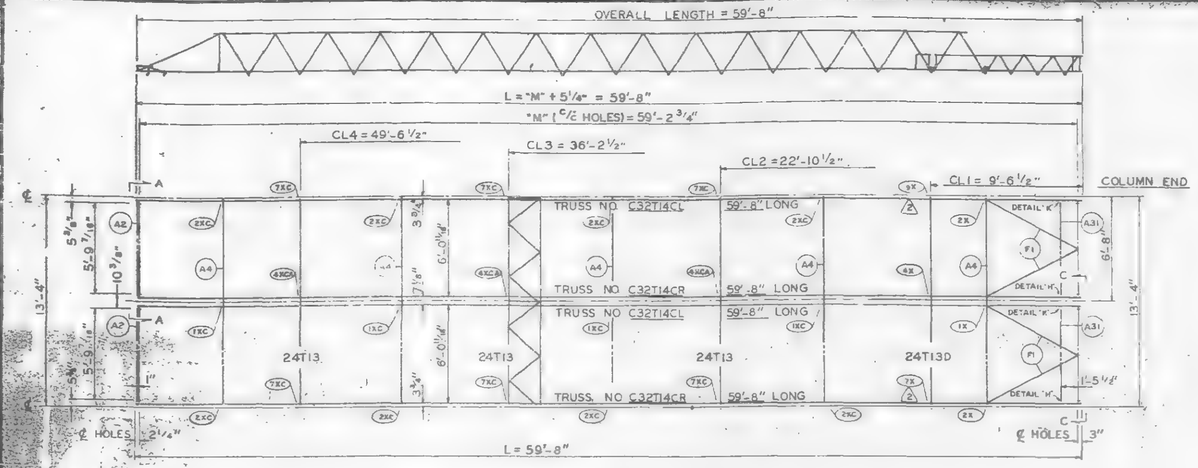
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

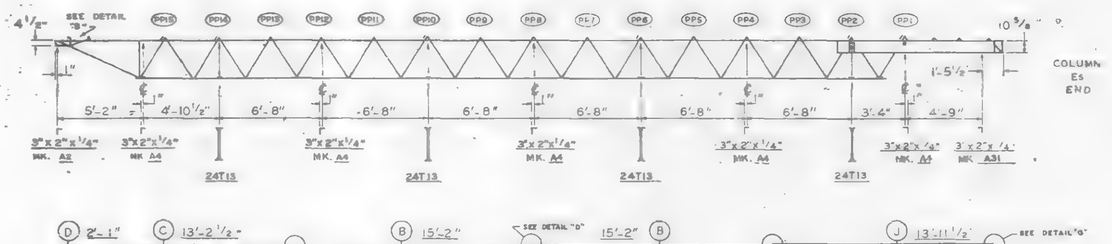
PANEL B7A - 13'-4" x 59'-9"

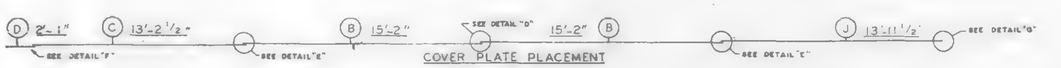
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-26 PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N. CHUNG DATE MAY 8, 1969
DETAILED BY A.L. WEBB		W.T.C. 221

IN CHARGE OF FABR. DEV.
SHEET NO FP B7A

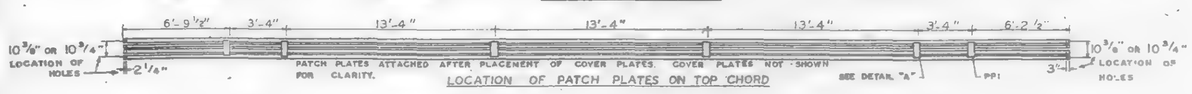


PANEL NO. B7C SIZE 13'-4" x 59'-8"



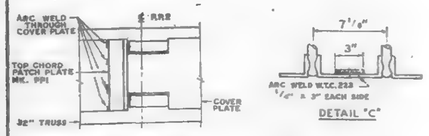


COVER PLATE PLACEMENT



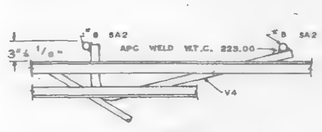
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD



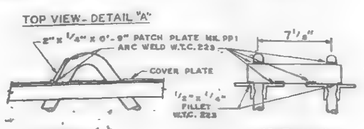
TOP VIEW - DETAIL "A"

DETAIL "C"

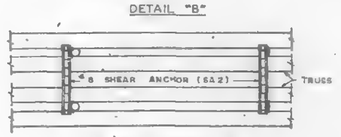


DETAIL "B"

DETAIL "D" DETAIL "E"



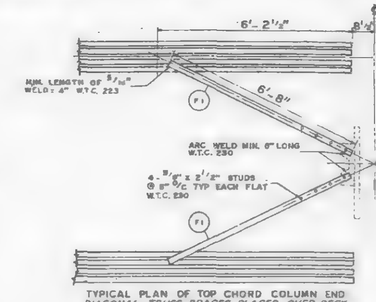
DETAIL "A" SECTION B-B



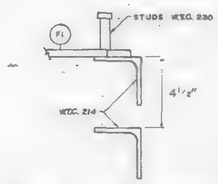
TOP VIEW DETAIL "B"

DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

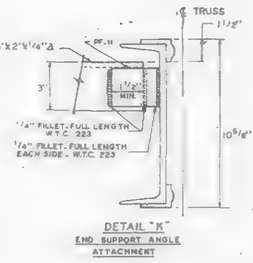


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

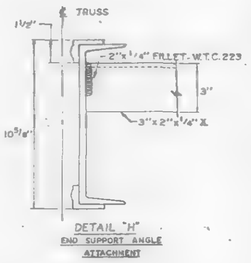
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3"x 2"x 1/4" ANGLE	A2	2	3"x2"x1'-4"= 5'-11 5/16"	ST 403
	A4	5	3"x2"x1'-4"= 13'-3"	ST 403
	A31	2	3"x 2"x 1/4"x5'-8"= 9"	ST 410
CLOSURE PLATES	PP.11	2	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1'-4" x 8'-6" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2"x 1/4"x 0'-9"	ST 400
	PP2	12	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	B	4	9"x .0135"x 15'-2"	ST 303
	C	2	9"x .0135"x 13'-2 1/8"	ST 303
	D	2	9"x .0135"x 2'-1"	ST 303
	J	2	9"x .0135"x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	16	2"x 1 1/2"x .25"x 6"	ST 400
"8 SHEAR ANCHOR	SA2	4	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	C81	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES (2)	P1	4	3 1/2"x 3 1/8"x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39"x 0'-9"	ST 400
	P3	4	4 1/2" x .39"x 1'-0"	ST 400
	P9	4	3"x 1 1/8"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4"x1/4" FULL THROAT FILLET.

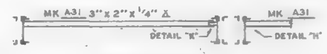
A = 1/4"
B = 1/4"



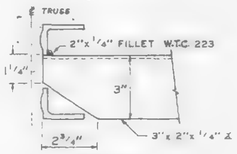
DETAIL "K" END SUPPORT ANGLE ATTACHMENT



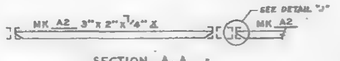
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
2	6-16-69	AS NOTED	G.D.
1	5-12-69	AS NOTED	G.D.

REF DRWG.

7-A83-26	10-4-68
7-A81-13	10-4-68
7-A82-8	7-22-68
7-A84-28	7-22-68
SB-124	3-24-69
7-A83-24	6-13-68

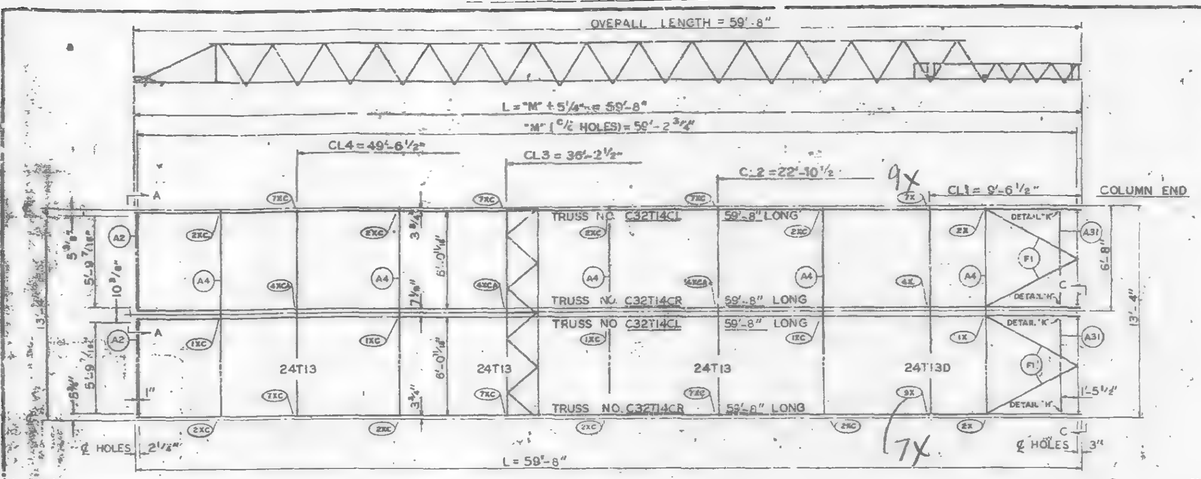
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 59 & 92 (EAST)

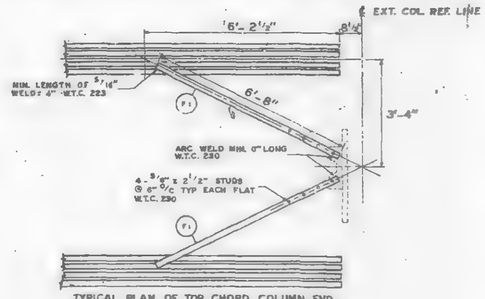
PANEL B7C-13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

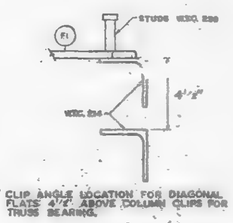
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-26	PLATE 2 OF —
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 1/28/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FD B7C 5



PANEL NO. B7C SIZE 13'-4" x 59'-8"



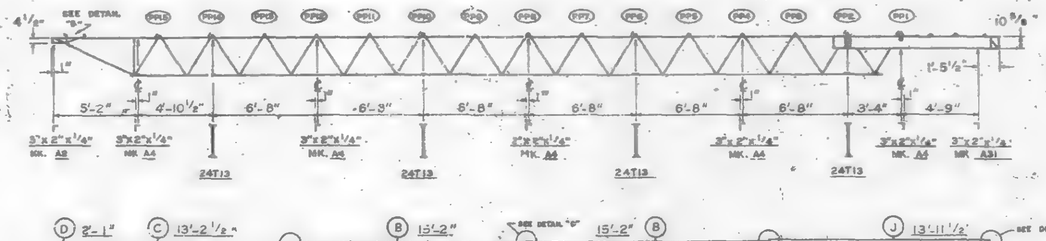
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

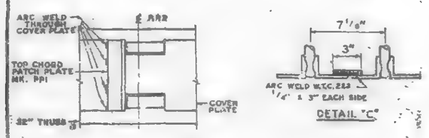


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

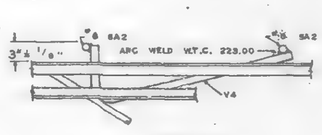
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	2	C32T14CL x 59'-8"	ST 214CL
	T14CR	2	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T13	3	24T13 x 13'-3"	ST 213
	T13D	1	24T13D x 13'-3"	ST 213D
3" x 2" x 1/4" ANGLE	A2	2	3" x 2" x 1/4" x 5'-11 13/16"	ST 403
	A4	5	3" x 2" x 1/4" x 13'-3"	ST 403
	A31	2	3" x 2" x 1/4" x 5'-8 1/8"	ST 41C
CLOSURE PLATES	PP-11	2	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	4	1 1/4" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	12	2" x 1/4" x 0'-9"	ST 400
	PP2	12	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	4	9" x .0135" x 13'-2"	ST 303
	C	2	9" x .0135" x 13'-2 1/2"	ST 303
	D	2	9" x .0135" x 2'-1"	ST 303
	J	2	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	18	2" x 1 1/2" x .25" x 6"	ST 402
7/8" ℄ SHEAR ANCHOR	SA2	4	7/8" ℄ REBAR x 0'-9"	ST 402
CONNECTION BAR	CB1	5	1" ℄ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/4" x 0'-6 1/2"	ST 400
	P2	3	4 1/2" x .38" x 0'-8"	ST 400
	P3	3	4 1/2" x .38" x 1'-0"	ST 400
	P8	4	3" x 1/2" x 1'-2"	ST 402
	P10	1	4 1/2" x .38" x 0'-5"	ST 402
⚠	P11	1	3" x 1/4" x 0'-8"	ST 402

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (J).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1/4" FULL THROAT FILLET.

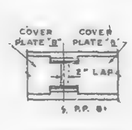




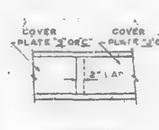
DETAIL "C"



DETAIL "B"

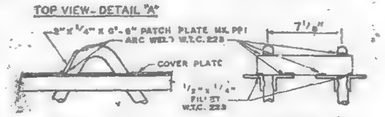


DETAIL "D"

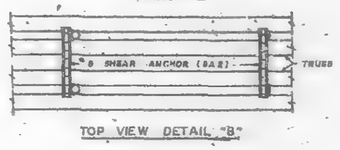


DETAIL "E"

TOP VIEW - DETAIL "A"



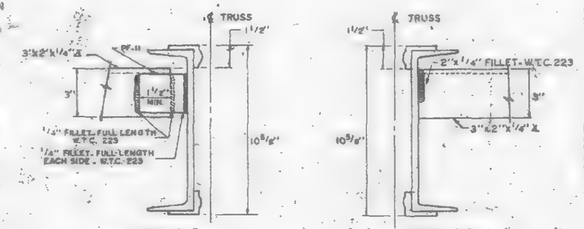
DETAIL "A" SECTION B-B



TOP VIEW DETAIL "B"

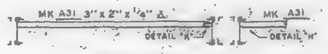
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENER W.T.C. 223.00

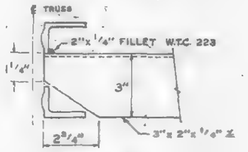


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

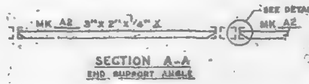
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	GDJ

SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RECEIVED
Date 6/6/69 By SK

REF DRWG.		
7-AB2-20	10-3-68
-AB1-13	10-4-68
7-AB2-8	7-22-66
7-AB4-2°	7-22-68
59-124	3-24-66
7-AB3-24	8-15-68

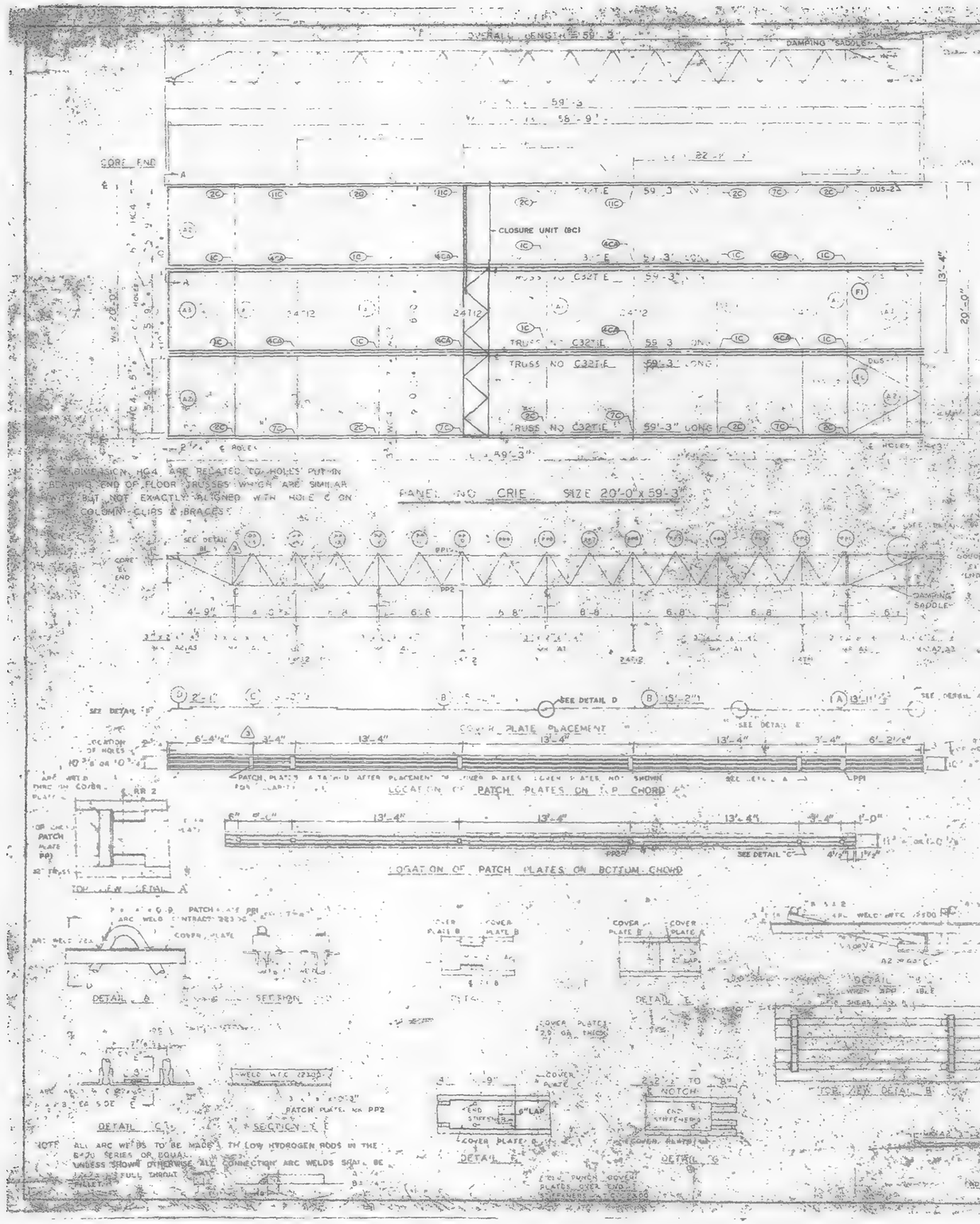
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 59 & 92 (EAST)

PANEL B7C - 13'-4" x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-26	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE	DRAWN BY Luch DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROJ. DEV.
DETAILED		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP B7C



REQUIRED MATERIAL PER PANEL

MATERIAL	MK	SIZE	LENGTH	WEIGHT
FOUR TRUSSES				
ANGLE				ST 403
				ST 403
				ST 402
	PP1	18		ST 400
PATCH PLATE	PP2	18		ST 400

COVER PLATE		3	3/8 x 2'-1"	ST 233
ANGLE CLIPS		21		ST 400
8 SHEAR ANCHOR	SA2	8	7/8" REBAR 1'-0"	ST 400
DAMPING SADDLE	DAS 2	2	3/8 x 3 1/2 x 3/8 x 13.6 1/8	ST 295
	DAS 2	1	3.2 x 3 1/2 x 3/8 x 3 7/8	ST 295
CONNECTION BAR	CB1	4	1 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 x 1 1/2 x 1/4 x 230 x 6'-5 1/2"	ST 212 CD 253
CONNECTION PLATES	P1	5	3 1/2" x 3 1/2" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	7	4 1/2" x .39" x 1'-0"	ST 400

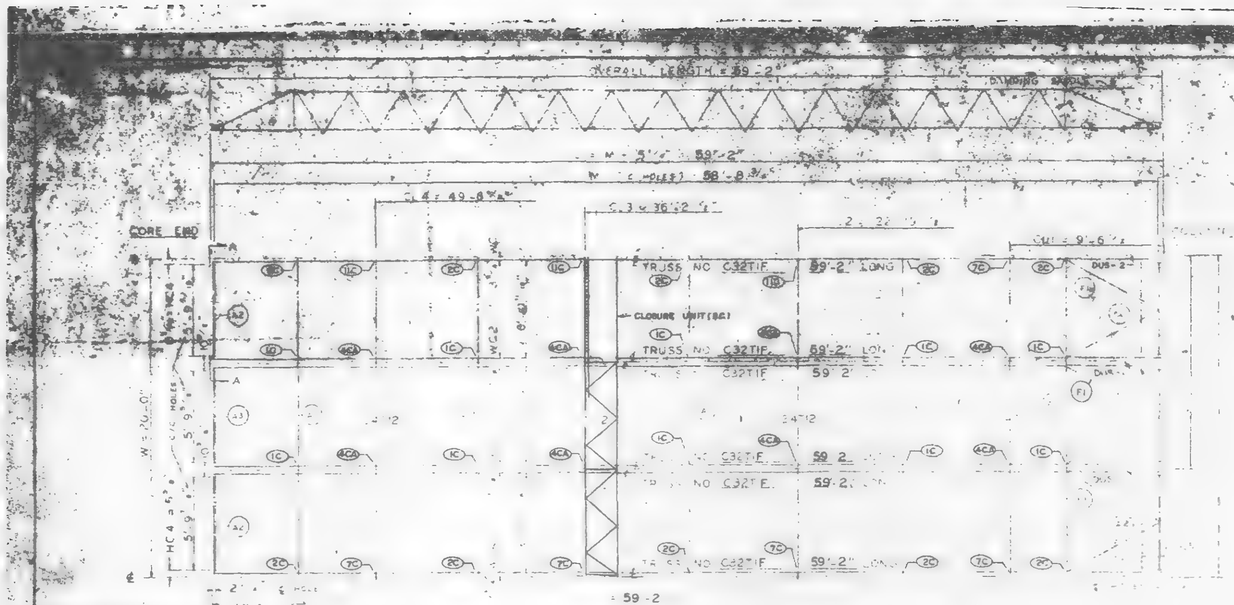
NO.	DATE	REVISION	BY
3	6-9-69	AS NOTED	G.D.C.
2	10-16-68	MAT'L LIST	G.D.C.
1	7-17-68	GENERAL	M.

10-15-68	
7-22-68	
7-26-68	
1-6-69	
7-22-68	
7-22-68	
10-1-68	

10-11 (SOUTH)

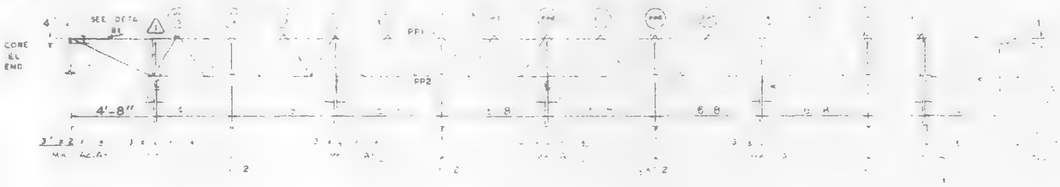
PANEL CR1E

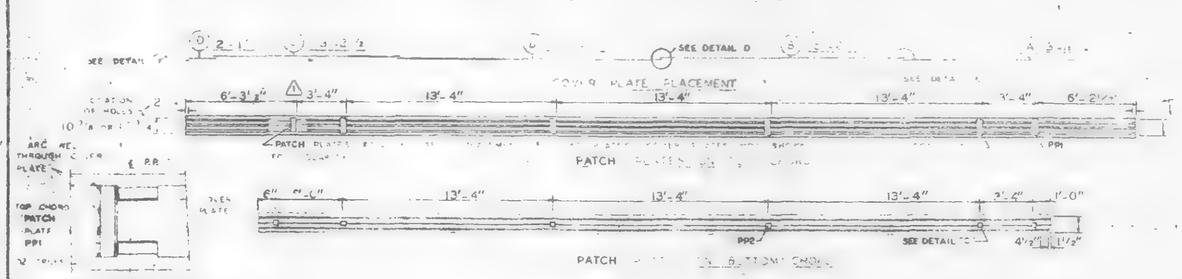
FABRICATED BY LACLEDE STEEL COMPANY
ERECTION BY JAMES STEEL CONSTRUCTION CO. MADISON, ILLINOIS
APPROVED FOR FABRICATION BY ... FOR FABRICATOR
APPROVED FOR ERECTION BY ... FOR ERECTOR
DESIGN DRAWING NO. T 383 B 4-1-68 PLATE
DRAWN BY ... DATE APRIL 10, 1968
CHECKED BY J.B. PAUL DATE APRIL 10, 1968
FABRICATION CONT. NO. W.Y.C. 221
IN CHARGE OF ENGR. DEV.
SHEET NO. FB-CR1E

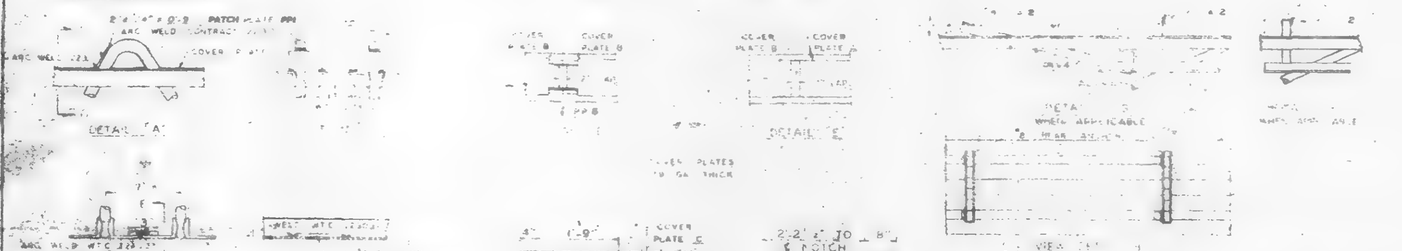


℄ & DIMENSION HC4 ARE RELATED TO HOLES AT BEARING END OF FLOOR TRUSSES WHICH ARE NOT AS WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES

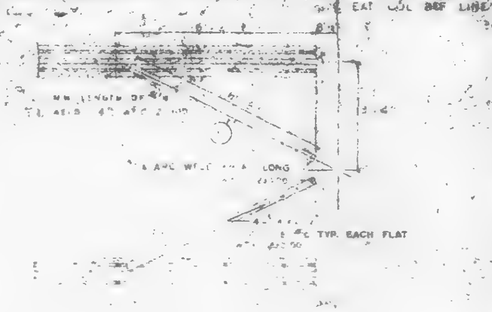
CRIF SIZE 20'-0" x 59'-2"

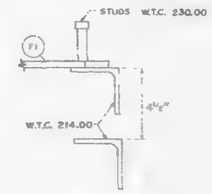






NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES		8	C32TIF x 59'-2"	ST201F
ROOF TRUSSES		1	24T12 x 49'-8"	ST212
	T2	7	24T12 x 19'-11"	ST 212
3 x 2 1/2 x 1/4 ANGLE	A1	5	3 x 2 1/2 x 1/4 x 12'-11"	ST 403
	A2	4	3 x 2 1/2 x 1/4 x 8'-11"	ST 403
	A3	2	3 x 2 1/2 x 1/4 x 5'-11"	ST 403
DIAGONAL FLATS	F	8	1/2 x 5 x 8'-8"	ST 402
PATCH PLATES	PP1	18	2 x 1/4 x 0'-10"	ST 400
	PP2	18	1/4 x 7"	ST 400
		3	15" x 5"	ST303
		3	35" x 5"	ST303
		3	35" x 5"	ST303
		3	3 x 2 1/2"	ST 403
		4	1/2 x 2 1/2 x 5	ST 400
		9	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE			3 x 3 x 3/8 6 3/8"	ST 298
			3/8	ST298
CONNECTION BAR	CB	4	1/4 x 1'-0"	ST 400
CLOSURE UNIT	BC	3	1/2 x 1 1/4" x	BT212
			30 x 6'-8 1/2"	204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4'-2" x .39" x 0'-9"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

10-15-68
7-22-68
7-22-68
1-6-68
7-22
7-22
10-15-68

47-48 (S) 47-48, 70-71 (N)

PANEL CRIF 20'-2" x 59'-2"

BLDG. 8 FLOORS 47-48 (EAST & WEST) 70-71 (WEST)

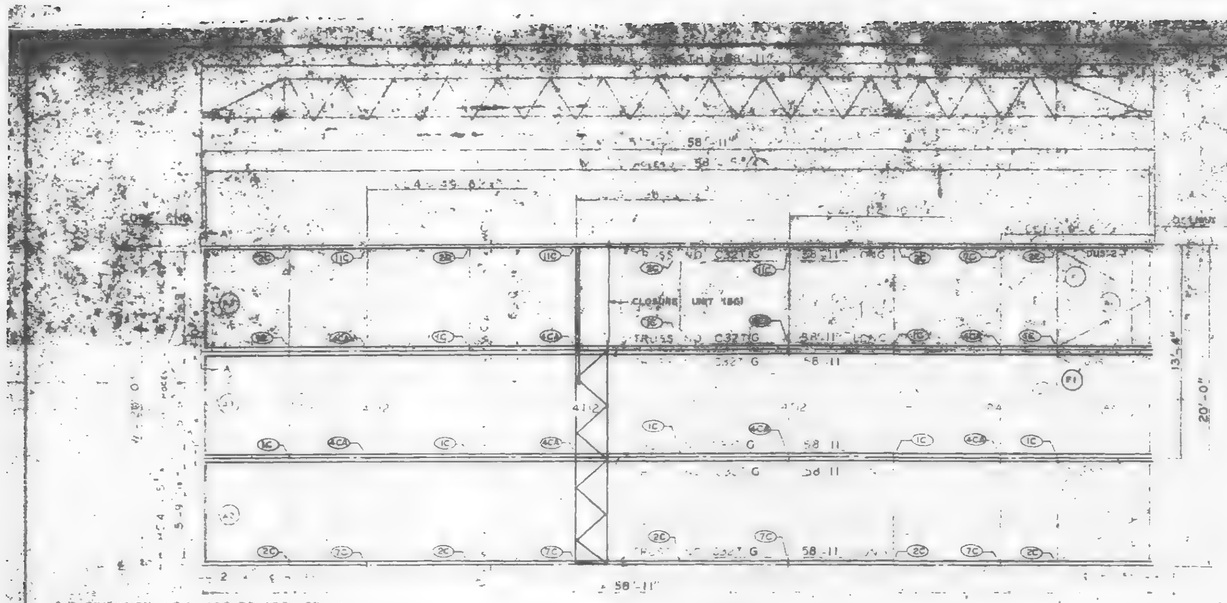
DESIGN DRAWING NO. 483 8 PLATE

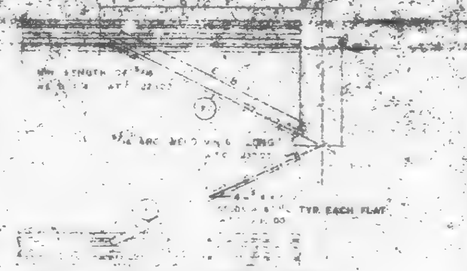
DRAWN J. DATE OCT. 23, 1968

CHECKED BY T.M. CHURCH IN CHARGE OF PROD. DEV.

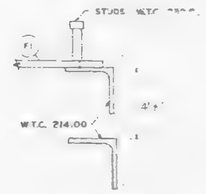
FABRICATION CONT. NO. 221

SHEET NO. FP CRIF





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

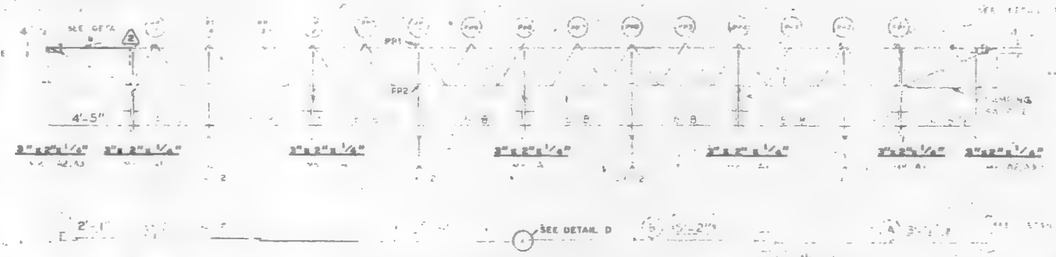


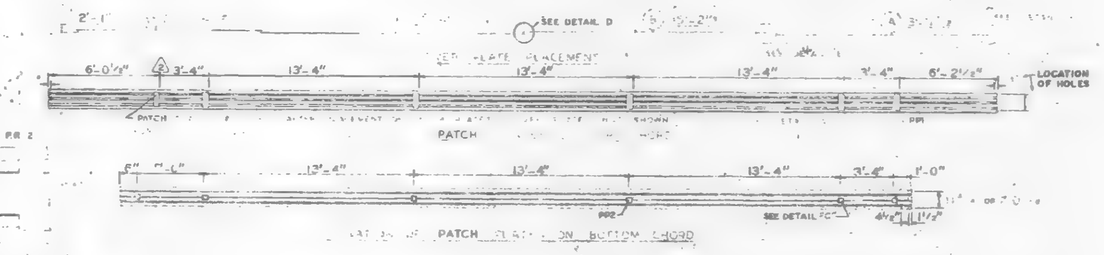
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
TRUSSES	TIC	4	C32TIC - 58'-11"	ST 400
BRIDGING TRUSSES	TI1	2	24T11 - 9	ST 412
	TI2	2	24T12 - 10	ST 412
	A1	6	4 x 3 x 1/4 x 10'-0"	ST 403
DIAGONAL ANGLE	A2	4	3 x 2 1/2 x 4 1/2 x 0'-10"	ST 403
	A3	2	4 x 3 1/2 x 4 1/2 x 1'-4"	ST 403
DIAGONAL FLATS	F1	6	4 1/2 x 6 x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 14 x 2'-9"	ST 400
	PP2	18	3" x 6 x 0'-3"	ST 400
				ST 400
	SA2	3		ST 400
CONNECTION BAR	CB1	4	1 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	24T12 x 14 x 8" 230 x 5'-6 1/8"	BC 214
CONNECTION PLATES	P1	5	3/16" x 8 3/8" x 0'-8 1/8"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

& DIMENSION HC4 ARE RELATED TO [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE REGULAR WITH BUT NOT EXACTLY ALIGNED WITH [illegible] THE COLUMN CLIPS & BRACES

CRIG SIZE 20'-0" x 58'-11"





PATCH PLATE PP1 ON BOTTOM CHORD

DETAIL C

SECTION C

DETAIL D

DETAIL E

DETAIL F

DETAIL G

DETAIL B

SECTION A-A

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4 x 1" FULL THROAT FILLET.

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	
2	6-9-69	AS NOTED
1	7-17-68	GENERAL
NO.	DATE	

2	10-15-68
	7-22-68
	7-26-68
	1-6-69
	7-22-68
	7-22-68
	10-15-68

39 (NORTH & SOUTH) 40 (SOUTH) 10-11 (NORTH)

BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) 2

DESIGN DRAWING NO. 1493 B PLATE

DRAWN BY [illegible] DATE APRIL 10, 1968

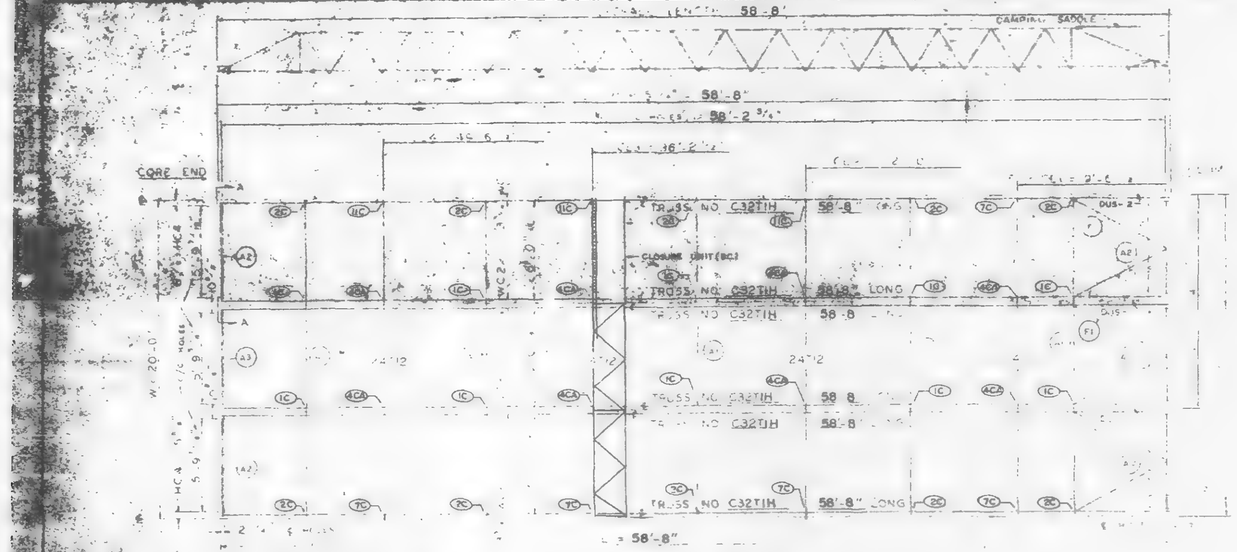
CHECKED BY J.R. PAUL DATE APRIL 10, 1968

ENGR. DEV.

FABRICATION CONT. NO. 221

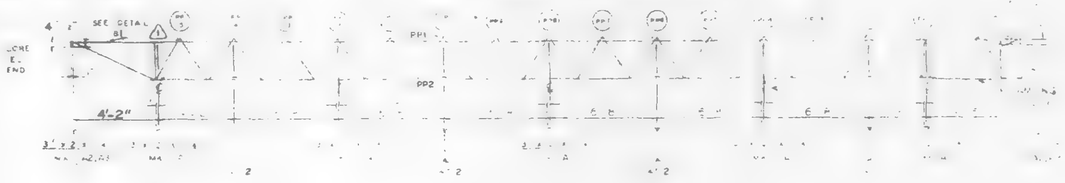
SHEET NO. FE CRIG

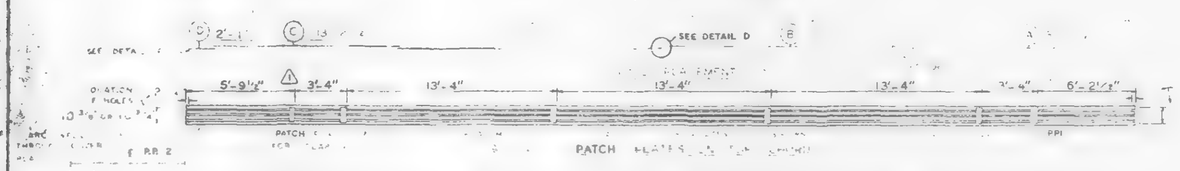
James White 11/2/70

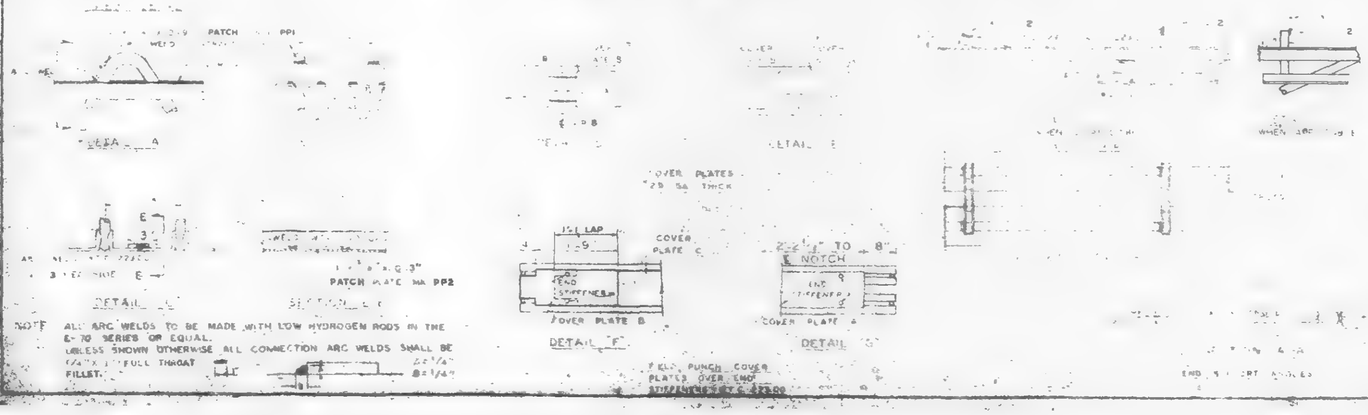


(A) DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE MARKED WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES.

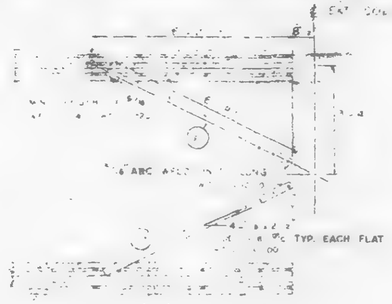
CRIH SIZE 20'-0" x 58'-8"

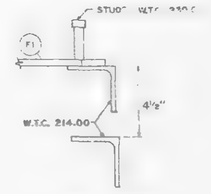






NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" x 1" FULL THROAT FILLET.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL - EACH PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG.
[illegible]	1H	1	C32TIH - 58'-8"	ST201H
[illegible]	T12	3	24T12 - 19'-[illegible]	BT212
3 x [illegible] x 1/4 ANGLE	A1	5	3 x 2 x 1/4 x 19'-11"	ST 403
	A2	4	3 x 2 x 1/4 x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 1/4 x 5'-11 1/2"	ST 403
DIAGONAL FLATS	F1	5	2 x 5/8 x 6'-8	ST 402
PATCH PLATES	PP1	18	2'-7 1/8" x 0'-9"	ST 400
	PP2	18	3'-2 3/8" x 0'-9"	ST 400
[illegible]	[illegible]	3	[illegible]	ST303
[illegible]	[illegible]	6	[illegible]	ST304
[illegible]	[illegible]	3	[illegible]	ST303
ANGLE	[illegible]	61	[illegible]	ST 400
[illegible] SHEAR [illegible]	SAE	9	[illegible] 0'-9"	ST 400
DIAPHRAGM	[illegible]	2	[illegible]	ST298
[illegible]	[illegible]	2	[illegible]	ST298
CONNECTION [illegible]	CB1	4	[illegible] 1'-3"	ST 400
CLOSURE UNIT	BC	1	[illegible]	BT212
	[illegible]	1	[illegible]	ST 404
CONNECTION PLATES	P1	5	3/8" x 3'-8" x 0'-6 1/2"	ST 400
	P2	4	4'-2" x .38" x 0'-9"	ST 400
	P3	1	4'-8" x .38" x 1'-0"	ST 404

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE		
1	6-9-69	AS NOTED	GDC

[illegible]	10-15-68	
[illegible]	7-22-68	
[illegible]	7-22-68	
[illegible]	1-6-69	
[illegible]	7-22	
[illegible]	7-22-69	
[illegible]	10-15-68	

79-80 (M)

CRIH x 58'-8"

BLDG. B FLOORS 79-80 (WEST) (1)

[illegible] COMPANY

[illegible] MADISON, ILLINOIS

DESIGN DRAWING NO. [illegible] B PLATE

APPROVED [illegible] DATE 12/1/70

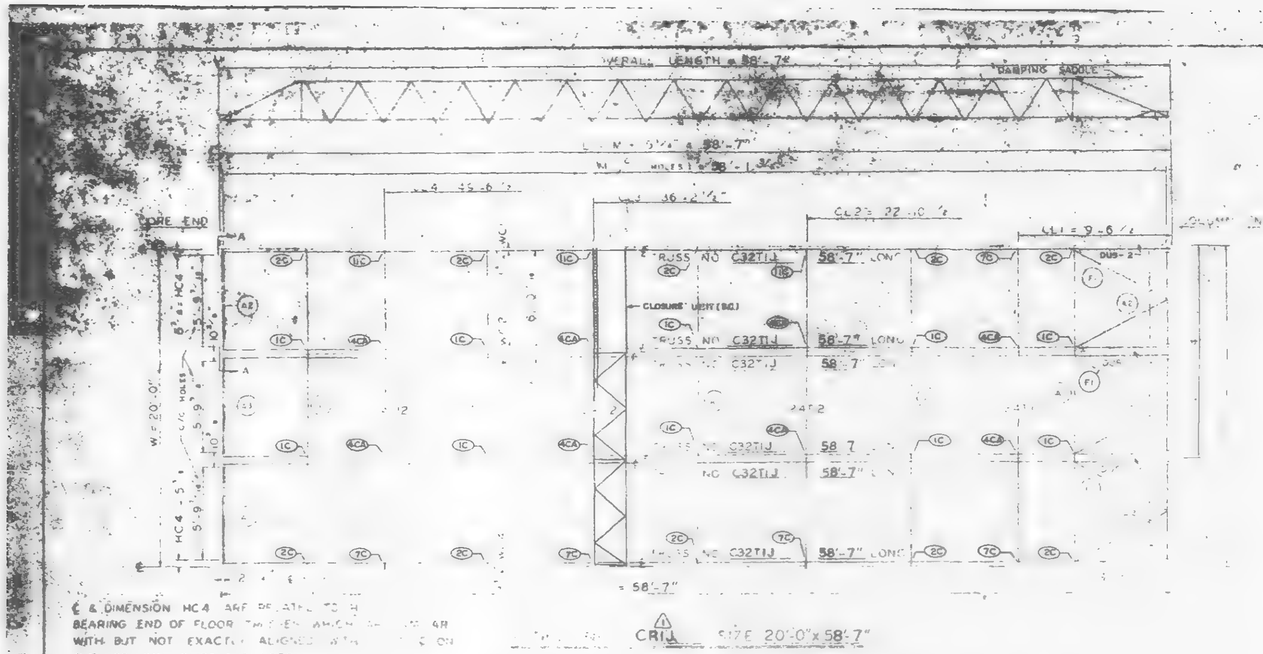
DRAWN BY [illegible] DATE OCT. 23, 1968

CHECKED BY T.M.CHIRA IN CHARGE OF PROD. DEV.

DETAILED BY W.S. HEER

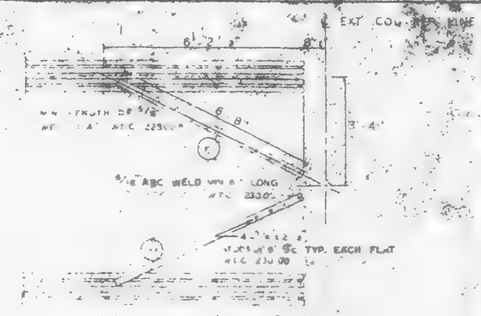
FABRICATION CONT. NO. W.T.E. 221

SHEET NO. CD CRIH



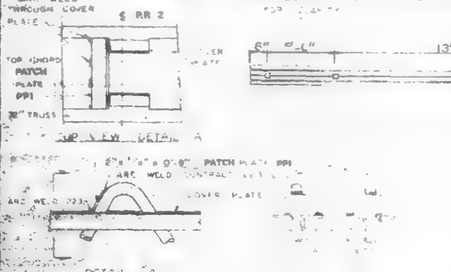
℄ & DIMENSION HC4 ARE RELATED TO H BEARING END OF FLOOR THEY ARE ALSO LOCATED WITH BUT NOT EXACTLY ALIGNED WITH ON THE COLUMN CLIPS & BRACES

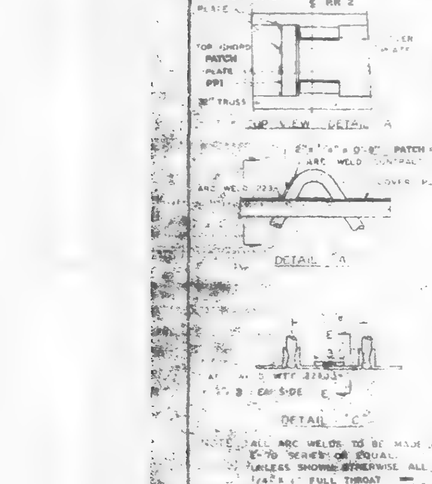
CRIJ SIZE 20'-0" x 58'-7"



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIJ	8	C32TIJ = 58'-7"	
BRIDGING TRUSSES	J11	1	24T11 = 18'-11"	BT211
	T12	3	24T12 = 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x 19'-11"	ST 400
	A2	4	3"x2"x1/4"x 8'-11"	ST 400
	A3	2	3"x2"x1/4"x 3'-11"	ST 400
DIAGONAL FLATS	F1	8	1 1/2"x 5/8"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4"x 0'-9"	ST 400
	PP2	18	3"x 3/8"x 0'-3"	ST 400
	A	3	2"x 2"x .135"x 13'-11 1/2"	ST303
	B	6	4"x .0135"x 13'-2"	ST303
	C	3	6"x .0135"x 13'-2 1/2"	ST303
	D	3	6"x .0135"x 8'-6"	ST303
ANGLE CLIPS		21	2"x 2"x 3/16"x 0'-6"	ST 400
3/8" SHEAR PLATE	SA2	9	3"x 0'-9"	ST 400
			3"x 3/8"x 3'-8 7/8"	ST298
			2"x 3/8"x 3'-8 7/8"	ST298
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x1 1/2"x 1 1/4"x 230"x 6'-8 1/2"	BT212 C2304
CONNECTION PLATES	P1	5	3/8"x 3"x 0'-6 1/8"	ST 400
	P2	4	4 1/8"x .39"x 0'-9"	ST 400
	P3	1	4"x .39"x 1'-0"	ST 400





LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISIONS	BY
1	6-9-69	AS NOTED	GDC

	10-15-69
	7-22-68
	7-22-68
	1-6-69
	1-3-68
	7-22-68
	7-22-68
	10-15-69

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

8 40 (N)

CRIJ X 58'-7"

BLDG. B FLOORS 40 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY

ERECTION BY MADISON, ILLINOIS

DESIGN DRAWING NO. 1-489-B 1 PLATE

APPROVED FOR CONSTRUCTION FOR PONYA James White DATE 1/2/70

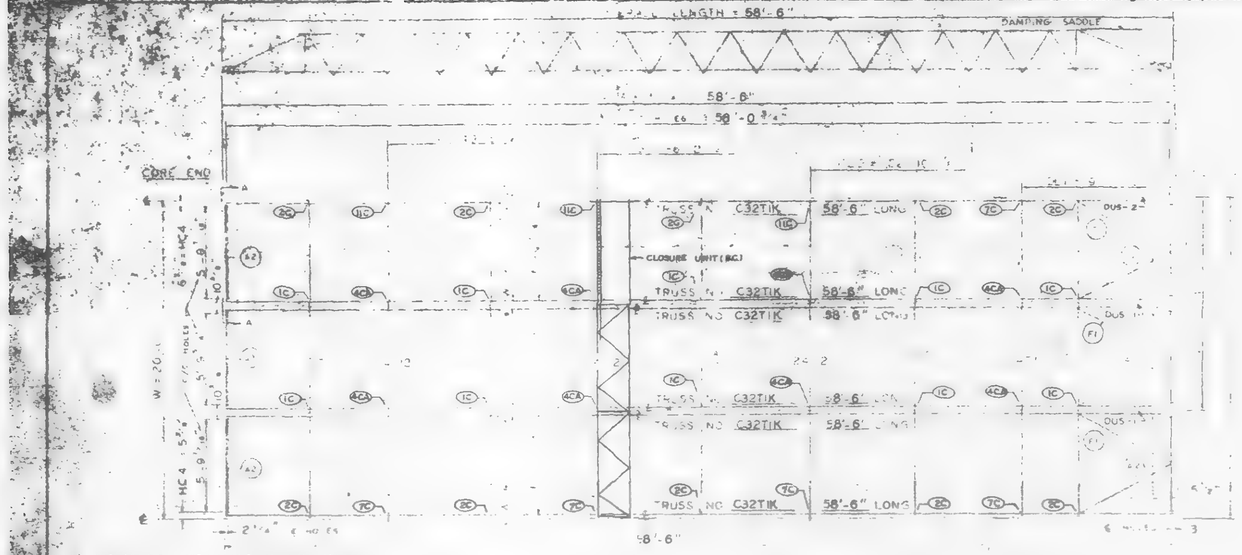
APPROVED FOR FABRICATION BY DATE FOR FABRICATION

DETAILED DRAWN BY DATE OCT 23, 1968

CHECKED BY TM CHURCH IN CHARGE OF PRODUCTION DATE OCT 23, 1968

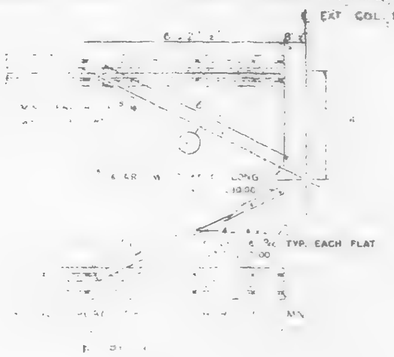
FABRICATION CONTROL NO. W.T.C. 221

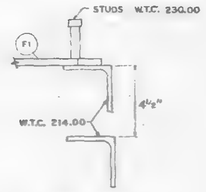
LACLEDE STEEL CO.



C & DIMENSION HC 4 ARE RELATED TO THE BEARING END OF FLOOR TRUSSES WHICH ARE WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES

C81K 20'-0" x 58'-6"



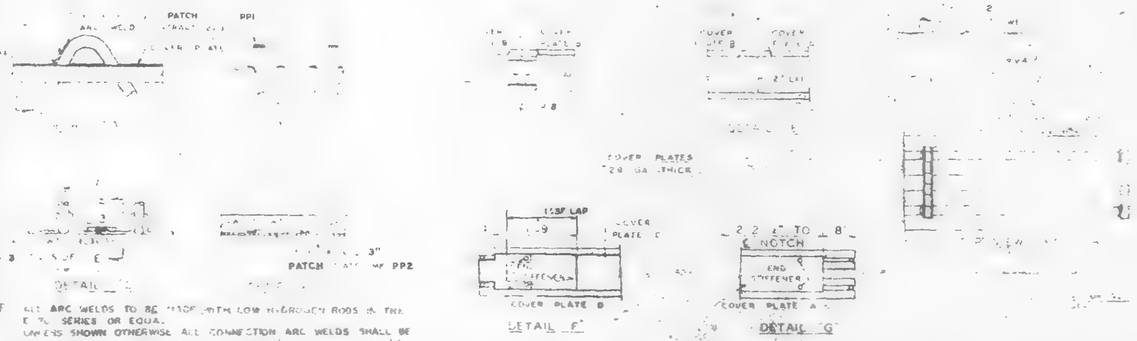


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4⅛" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1K	6	C32T1K - 58'-6"	ST206K
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	ST212
	T12	3	24T12 - 19'-11"	ST212
3" x 2" x ¼" ANGLE	A1	5	3 x 2 x ¼ x 4'-10⅞"	ST 403
	A2	4	3" x 2" x ¼" x 5'-11⅛"	ST 405
	A3	2	3" x 2" x ¼" x 5'-11¾"	ST 403
DIAGONAL FLATS	F1	6	1½" x 3" x ⅜" x 6'-3"	ST 402
PATCH PLATES	PP1	18	2" x ¼" x 0'-8"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
LIER PLATES	A	3	8" x 0.135" x 13'-11½"	ST303
	B	6	8" x 0.135" x 15'-2"	ST303
	C	3	9" x .0135" x 13'-8½"	ST303
	D	3	7" x 0.135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1⅛" x 3/16" x 8'-0"	ST 400
⅝" ø SHEAR ANCHOR	SA2	9	⅝" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3½" x 3½" x ⅜" x 2'-6⅞"	ST 298
	DUS2	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-9"	ST 400
CLOSURE UNIT	BC	3	24x11½" x 1¼" x 230 x 6'-6⅛"	ST 212 ST 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-8½"	ST 400
	P2	4	4½" x .38" x 0'-8"	ST 400
	P3	1	4½" x .38" x 1'-3"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN ENG. E 70 SERIES OR EQUA. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET. A: 1/4" B: 1/4"

NO	DATE	REVISION	BY
1	10-15-68		
2	7-22-68		
3	7-22-68		
4	1-6-69		
5	1-3-69		
6	7-22-68		
7	7-22-68		
8	10-15-68		

PORT AUTHORITY

45-46 (S) 46 (N)

PANEL C81K 20'-0" x 58'-6"

BLDG. B FLOORS 45 (EAST) 46 (EAST & WEST)

ALLEGHENY STEEL COMPANY

DESIGN DRAWING NO 7483-B PLATE

APPROVED FOR FABRICATION DATE 1/2/70

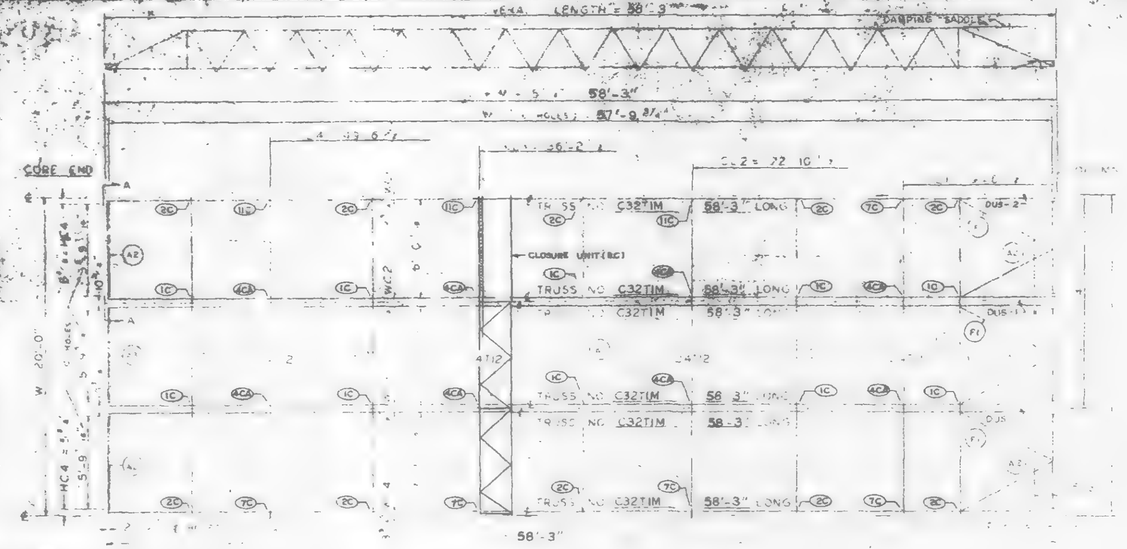
DRAWN BY DATE OCT. 23, 1968

APPROVED FOR FABRICATION DATE

CHECKED BY T.M.CHURA IN CHARGE OF DATE OCT. 23, 1968 PROD. DEP.

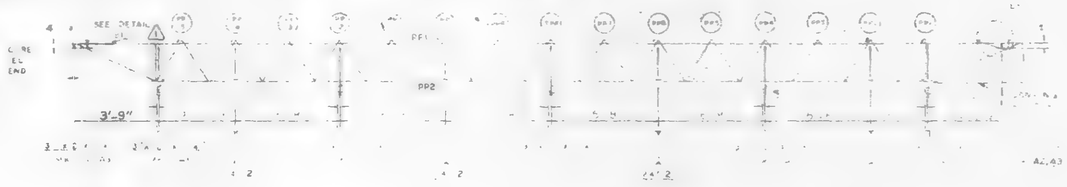
DETAILED BY FABRICATION CONT. NO. SHEET NO. 7-A

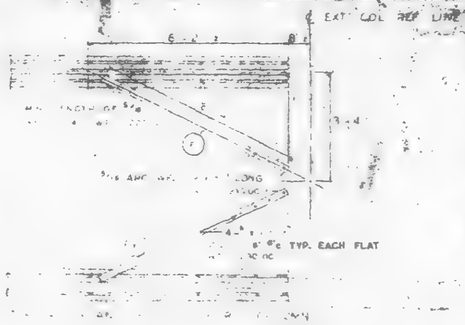
SCALE 3/8" PC C81K

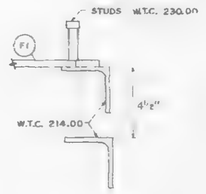


E & DIMENSION HC4 ARE RELATED TO HOLE BEARING END OF FLOOR TRUSSES WHICH ARE WORKED WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES

CRIM SIZE 20'-0" x 58'-3"





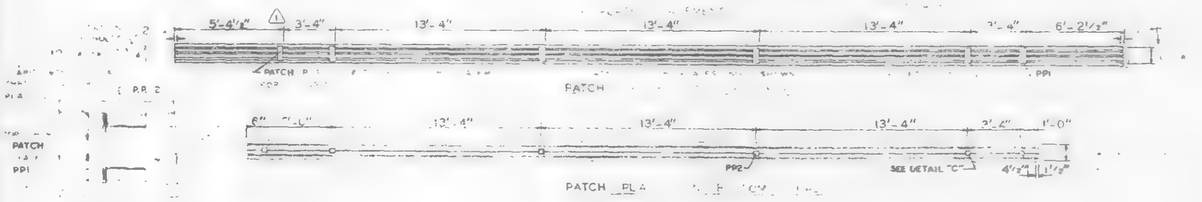


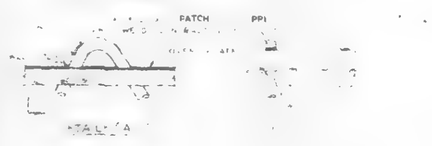
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DWGS
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIM	8	C32TIM 58'-3"	ST2DUM
BRIDGING TRUSSES	T1	1	24T11 - 19'-11"	ST212
	T12	3	24T12 - 19'-11"	ST212
3"x2½"x¼" ANGLE	A1	9	3"x2½"x¼" x 19'-11"	ST 403
	A2	4	3"x2½"x¼" x 9'-11½"	ST 402
	A3	2	3"x2½"x¼" x 5'-11½"	ST 402
DIAGONAL FLATS	F1	5	4" x 5/16" x 6'-8"	ST 400
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ½" x 0'-3"	ST 400
	A	3	9" x .135" x 3'-11"	ST 303
	B	6	9" x .135" x 5'-2"	ST 303
	C	3	9" x .0135" x 13'-2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1½"x⅛"x10'-6"	ST 400
ø8 SHEAR ANCHOR	SA2	9	ø8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3⅛"x3½"x⅜"x3'-6⅞"	ST298
	DUS2	2	3⅛"x3½"x⅜"x3'-6⅞"	ST298
CONNECTION BAR	CB1	4	1 ø x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x1½"x⅛"x 230 x 6'-6½"	BT212 SD204
CONNECTION PLATES	P1	5	3½"x3⅜"x 0'-6½"	ST 400
	P2	4	4½"x.39"x 0'-9"	ST 400
	P3	1	4'-8"x.39"x 1'-0"	ST 400

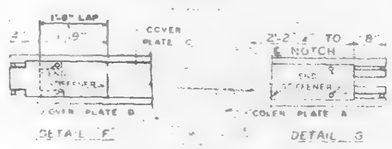
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

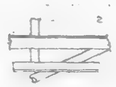




NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼"x 1" FULL THROAT FILLET.



FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



NO	DATE	REVISION	BY
1	10-15-68		
2	7-22-68		
3	7-22-68		
4	1-6-69		
5	1-30-69		
6	7-22-69		
7	7-22-69		
8	10-15-69		

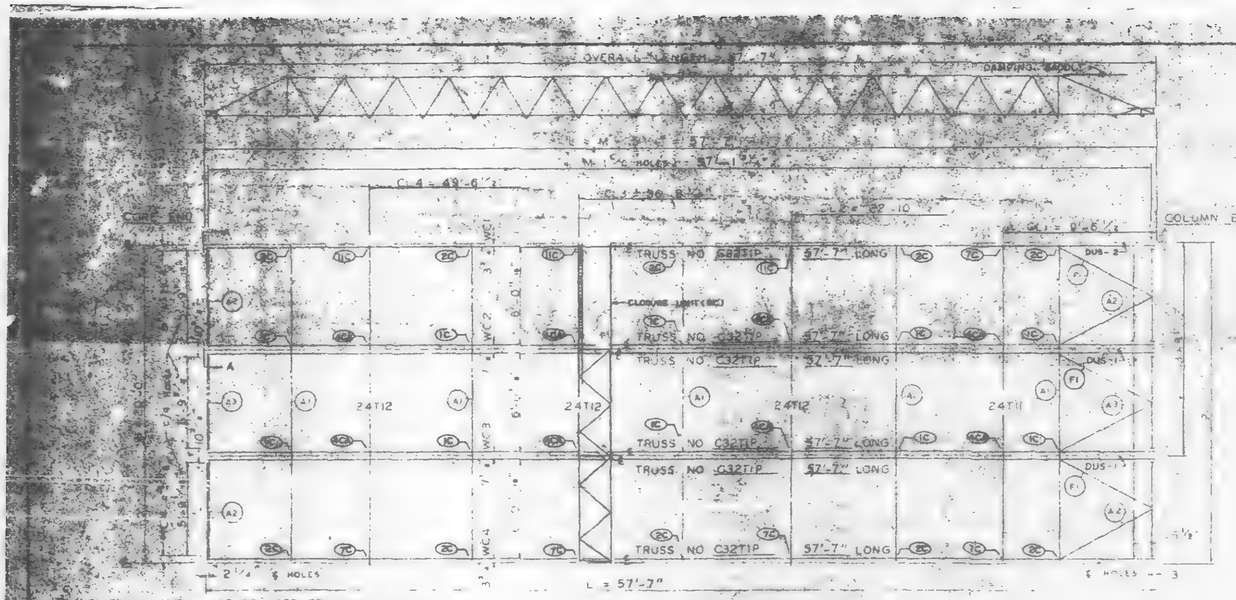
WORLD TRADE CENTER

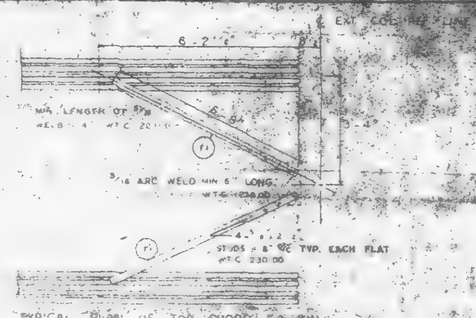
72-73 (N)

CRIM 20'-0" x 58'-3"

BLDG. B FLOORS 72-73 (WEST)

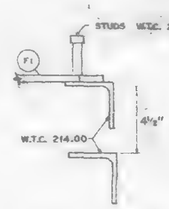
FABRICATION BY	LACLEDE STEEL COMPANY		
WELDS		DESIGN DRAWING NO 483-B	PLATE
APPROVED FOR FABRICATION	DATE 12/10	DRAWN BY S.B. DATE OCT 23 1968	
APPROVED FOR FABRICATION	DATE	CHECKED BY T.M.CHURA DATE OCT 23 1968	IN CHARGE OF PROD. DEPT.
DETAILED BY A.G. KERBY		FABRICATION CONT. NO WTC 221	SHEET NO





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS FRACES PLACED OVER DECK BY W.T.C. 223.00

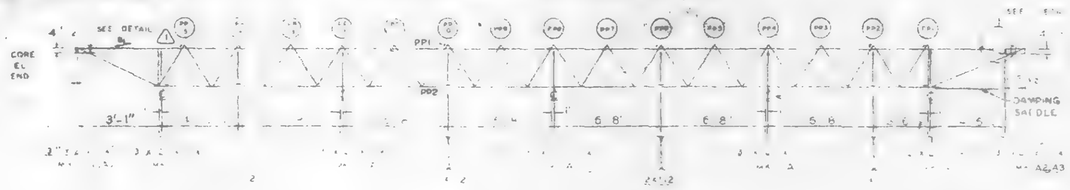
REQUIRED MATERIAL FOR PART				
MATERIAL	MK	PCS	SIZE	SEE DWG
FLOOR TRUSSES	TIP	8	C32TIP @ 57'-7"	
BRIDGING TRUSSES	T11	1	24T11 @ 18'-1"	ST 402
	T12	3	24T12 @ 18'-1"	
ANGLES	A1	8	3"x2½"x¼" @ 20'-0"	ST 402
	A2	4	3"x2½"x¼" @ 5'-8"	
	A3	8	3"x2½"x¼" @ 4'-8"	
DIAGONAL FLATS	F1	8	1'-2"x 5/8"x 6'-6"	ST 402
PATCH PLATES	PP1	18	2'-3"x 3/4"x 0'-9"	ST 402
	PP2	18	3'-1"x 5/8"x 0'-3"	ST 402
COVER PLATES	A	8	9"x 0.135"x 5'-8"	ST 402
	B	8	9"x 0.135"x 4'-8"	ST 402
	C	8	9"x 0.135"x 4'-0"	ST 402
ANGLE CLIPS	CL	24	3"x1½"x¼" @ 4'-6"	ST 402
⅞ SHEAR ANCHOR	SA2	8	⅞ SHEAR @ 2'-8"	
DAMPING SADDLE	DUS-2	1	5'-6"x 3'-2½"x 0'-6"	ST 402
CONNECTION BAR	CB1	4	1'-3"x 1'-3"	ST 402
CLOSURE UNIT	BC	3	2'-1½"x 4¾"x ⅜" @ 5'-8½"	ST 402
CONNECTION PLATES	P1	5	3½"x 3½"x ⅜" @ 0'-6"	ST 402
	P2	4	4½"x .38"x 0'-9"	ST 402
	P3	1	4½"x .38"x 1'-0"	ST 402

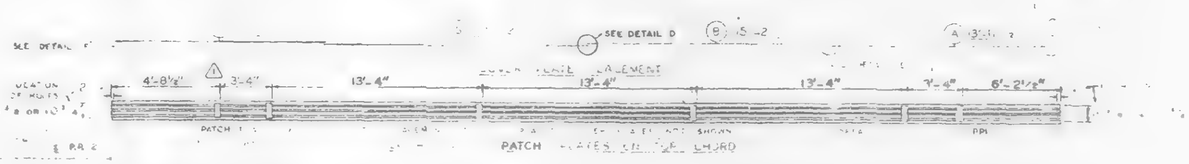


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

(A) DIMENSION NO 4 ARE RELATED TO HOLE PATTERN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH [illegible] ON THE COLUMN CLIPS & BRACES

MARK NO. GRIP SIZE 20'-0" x 57'-7"





LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE		BY
1	6-9-59	AS NOTED	GJC

ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.

74 (N)

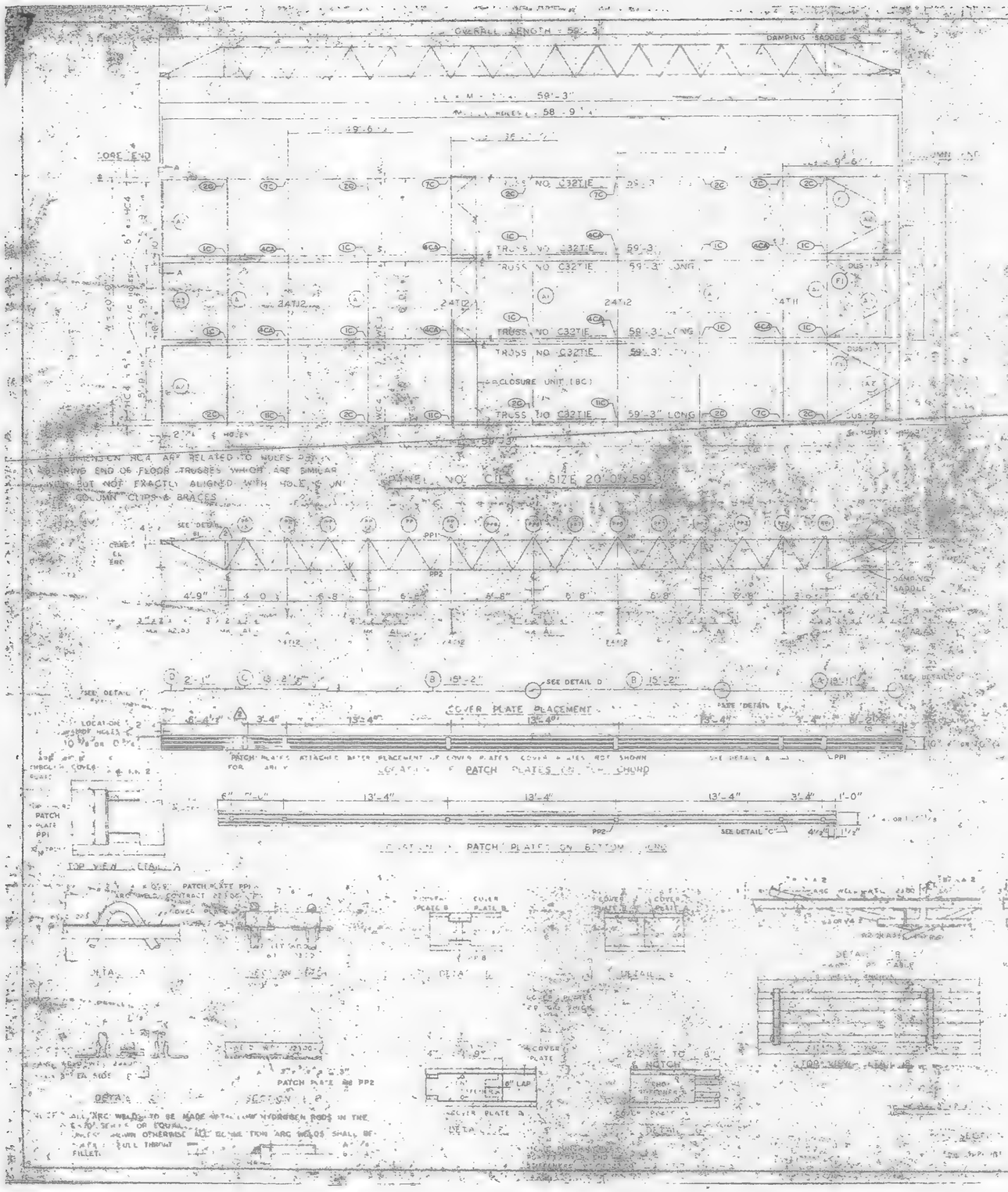
GRIP [illegible] 57'-1"

BLDG. B FLOORS 74 (WEST) 1

[illegible] COMPANY

DESIGN DRAWING NO. AH3 B PLATE

APPROVED FOR FABRICATION BY [illegible] FOR BOWEN	DATE 1/2/59	DRAWN BY [illegible] DATE OCT 23, 1958	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY TMC/NBA DATE OCT 23, 1958	IN CHARGE OF PROJECT [illegible]
DETAILED BY [illegible]		FABRICATION CONT NO. W.T.C. 221	SHEET NO. 7 FB GRIP



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG.
FLOOR TRUSSES				
ANGLE	A1	5	3 x 2½ x ⅜ x 9'-9"	ST 403
	A2	4	3 x 2½ x ⅜ x 5'-1½"	ST 403
	A3	2	3 x 2½ x ⅜ x 4'-10"	ST 403
				ST 402
PATCH PLATE	PP1	18		ST 400
	PP2	18	8 x 1'-3"	ST 400
COVER PLATES	B	6	9 x 0'-8" x 9'-7"	ST 403
	C	3	9 x 0'-8" x 4'-11"	ST 403
	D	3	7½ x 0'-8" x 4'-11"	ST 403
ANGLE CLIPS	C1	28	2½ x 2½ x ⅜ x 0'-5"	ST 400
"B" SHEAR STUD	SA2	6	WELD x 0'-8"	ST 400
DAMPING SADDLE	DS1	2	9" x 5½" x 3" x 6'-6"	ST 295
	DS2	1	3½" x 7" x 2¾" x 6'-6"	ST 295
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-6x1 ⅛" x 1½" x 6'-6½"	ST 212
			230 x 6'-6½"	CD 201
CONNECTION PLATES	P1	5	3½" x 5" x 0'-6"	ST 400
	P2	4	4½" x .30" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
2	6-8-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

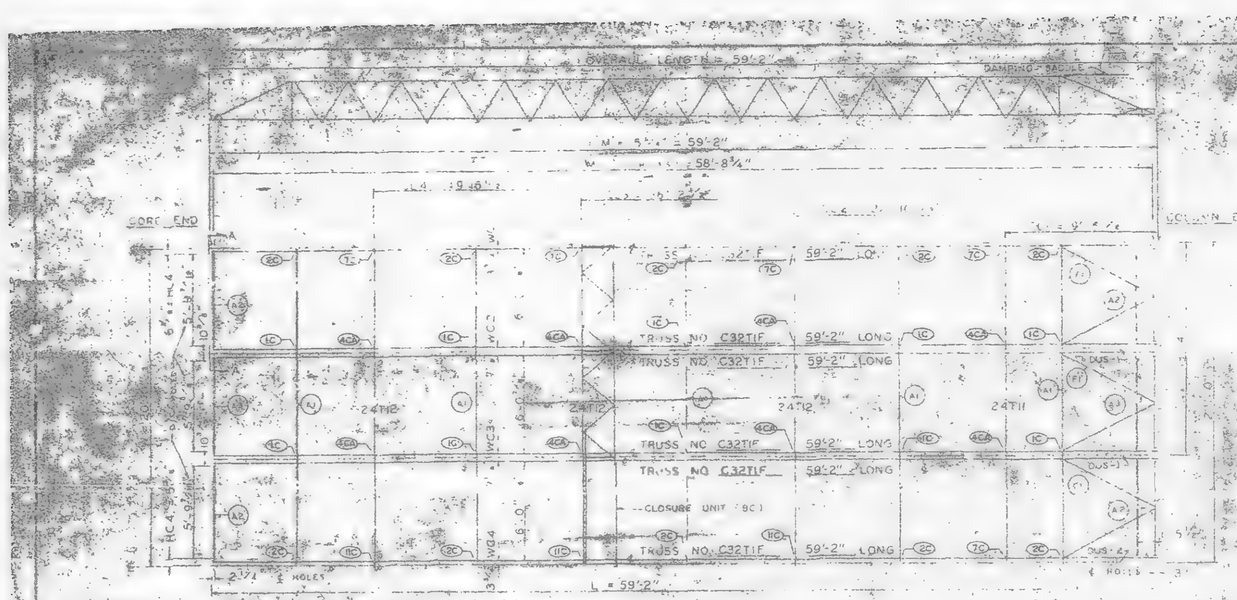
ABA-B1	10-15-68
ABA-B2	7-22-68
ABA-A1	7-22-68
ABA-A2	1-6-69
ABA-A3	7-22-68
ABA-B	7-22-68
ABA-C	7-22-68
ABA-A2	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
PORT OF NEW YORK AUTHORITY

BLDG. 10-11 (NORTH & SOUTH)
PANEL TYPE C 3E-3

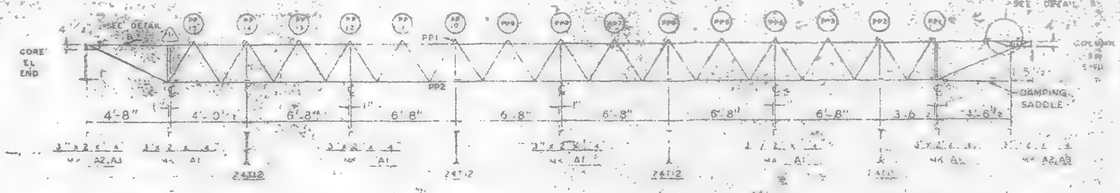
FABRICATION BY LEVEDL STEEL COMPANY

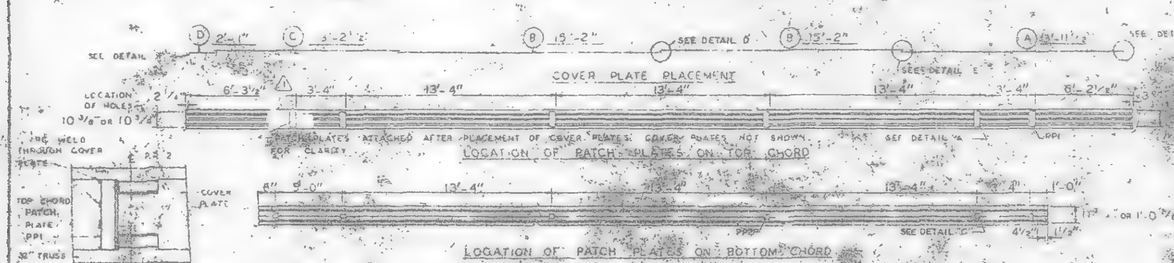
APPD. FOR FABRICATION	DATE	DESIGN DRAWING NO. ABA-7	
APPD. FOR ERECTION	DATE	DRAWN BY GWL	
		DATE APRIL 10, 1968	
APPD. FOR ERECTION	DATE	CHECKED BY J.B. PAUL	IN CHARGE OF PROD. DEPT.
		DATE APRIL 10, 1968	
		FABRICATION CONT. NO.	SHEET NO.

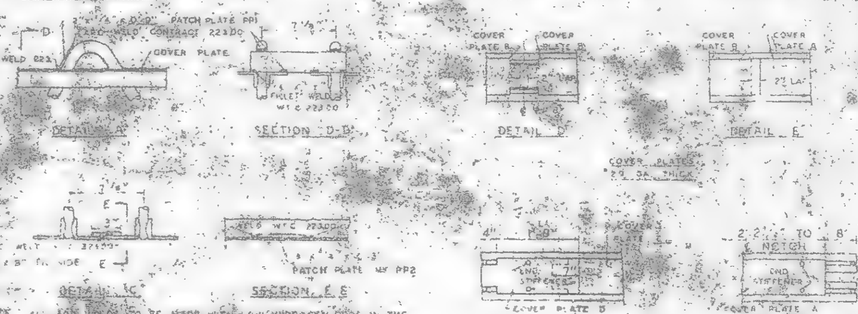


& DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

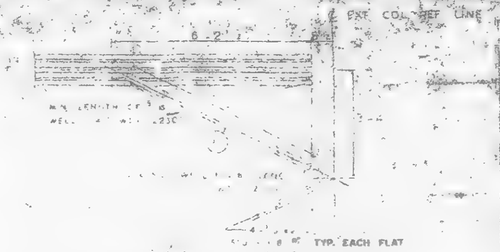
PANEL NO. C1F SIZE 20'-0" x 59'-2"







NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 8" FULL THROAT FILLET.



REQUIRED MATERIAL					
FLOOR TRUSSES	TF	6	24"H 59'-2"		
	T1	1	24"H		
EDGING	T1X	3	24"H		
	A	8	3 x 3 x 5/16 x 5'-0"	ST A36	
ANGLE	B	4	3 x 3 x 5/16 x 1'-3"	ST A36	
DIAGONAL SEATS	S1	5	PL ½" x 5" x 1'-0"	ST A36	
PATCH PLATE	PP1	16	PL ½" x 0'-9" x 0'-9"	ST A36	
	PP2	18	PL ½" x 0'-9" x 0'-9"	ST A36	
FLOOR PLATES	B	6	PL ½" x 1'-8" x 5'-0"	FLOOR	
	C	29	PL ½" x 0'-10⅛" x 5'-0"	ST A36	
	D	1	PL ½" x 0'-8⅛" x 5'-0"	ST A36	
ANGLE CLIP	C1	2	2" x 1½" x ¼" x 5"	ST A36	
⅝ ø SHEAR ANCHOR	SA2	6	⅝" ø x 2'-6"		
DAMPING SADDLE	DUS1	2	PL ⅜" x 2'-9" x 1'-3"	ST A36	
	DUS 2	1	PL ⅜" x 2'-3" x 1'-3"	ST A36	
CONNECTION BAR	CB1	4	PL ½" x 1'-0" x 1'-3"	ST A36	
CLOSURE UNIT	SC	3	PL ½" x 1'-6" x 1'-4" x 5'-0"	ST A36	
			230 x 5'-0" x 6"		
CONNECTION PLATES	P1	5	PL ⅜" x 1'-3" x 0'-8⅛"	ST A36	
	P2	4	PL ⅜" x 1'-3" x 0'-9½"	ST A36	
	P3	1	PL ⅜" x 1'-3" x 1'-0"	ST A36	

LETTERS AND NUMBERS IN ELLIPSES i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 203

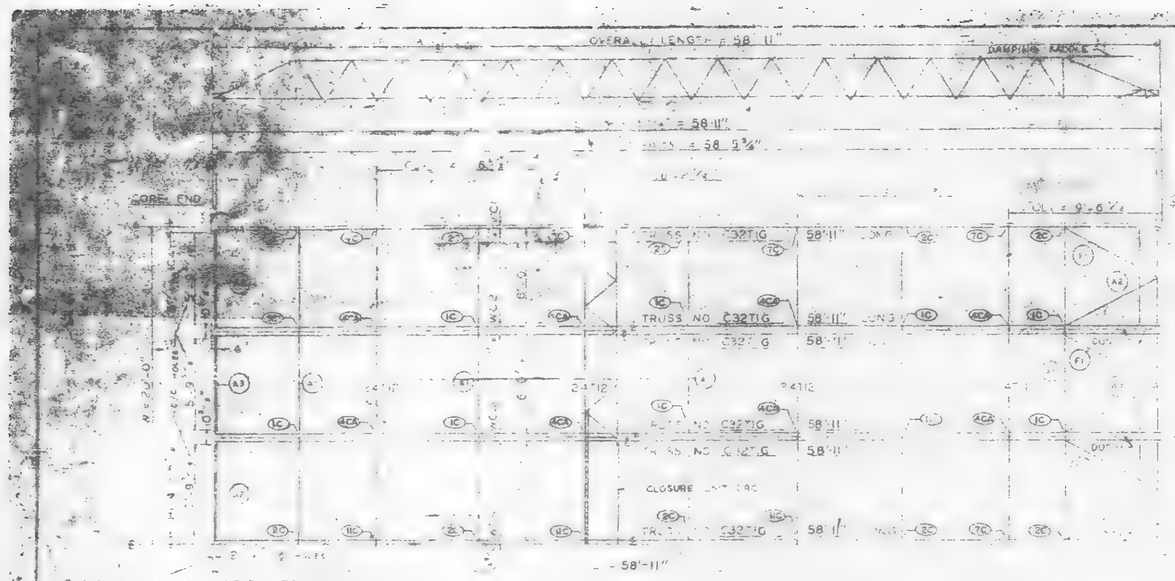
NO.	DATE	REVISION
1	8-6-69	AS NOTED

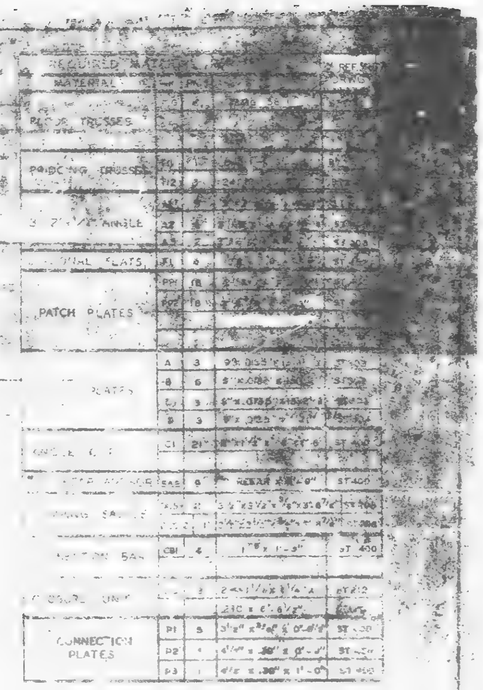
REF. DRWG

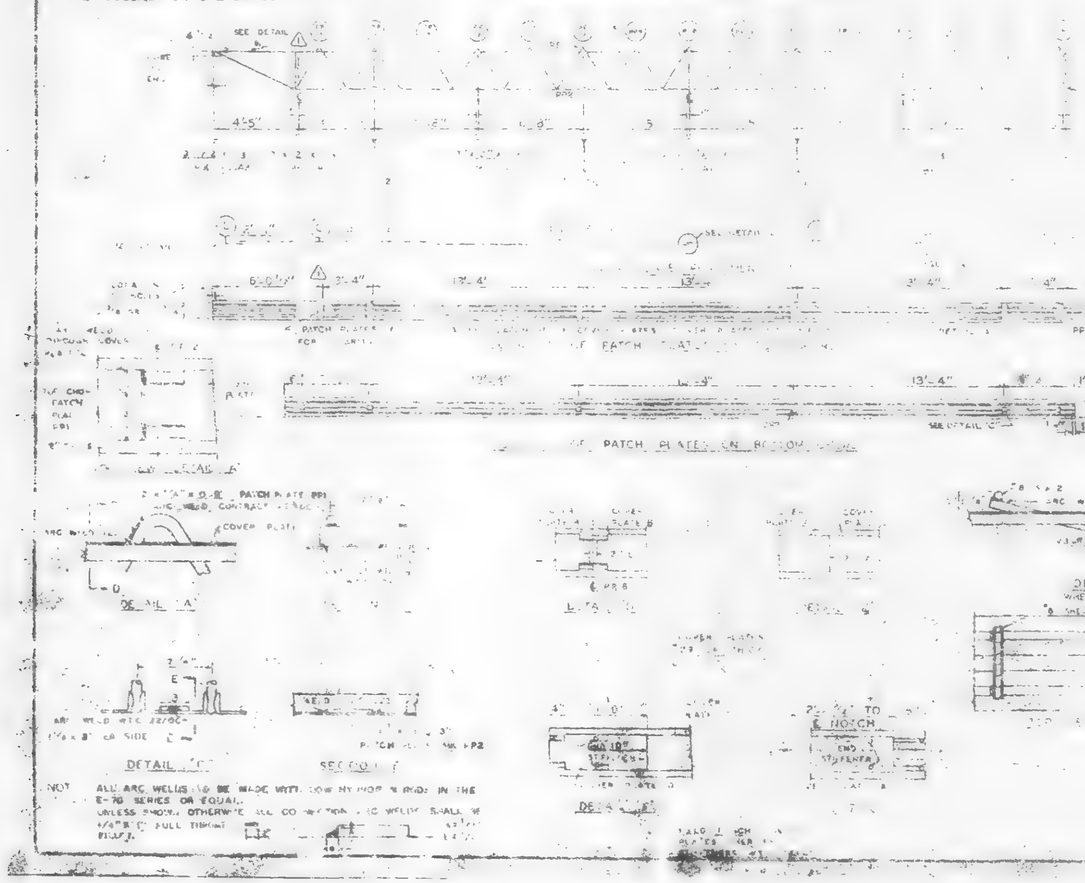
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

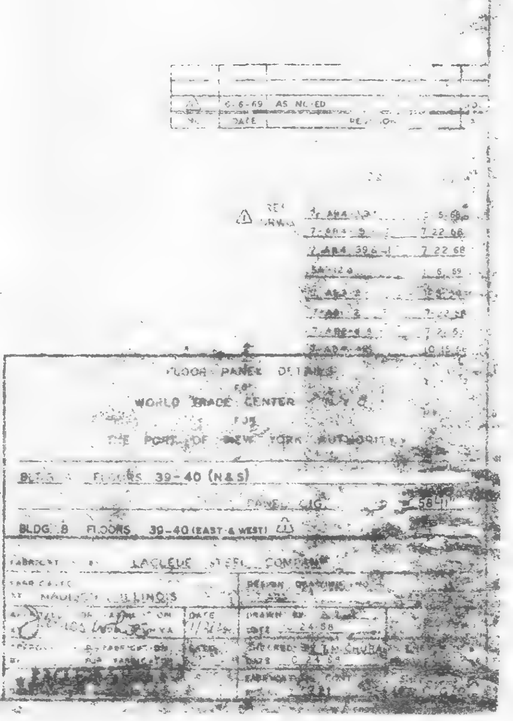
BLDG. A FLOORS 47-48 (N&S), 70-71 (N)
PANEL C1F
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST) (S)

FABRICATION BY LEDGE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
ERECTION BY
2ND FLOOR
DESIGN
DRAWN
CHECKED BY Y.M. HUI
DATE 6-24-68


OVERALL LENGTH = 58'-11"
CAMPING RADIUS
= 58'-11"
= 58'-5⅜"
CORE END
CLOSURE END
TRUSS NO. C32TIG
58'-11"
CLOSURE UNIT
58'-11"


REQUIRED MATERIAL
MATERIAL
PIECE TRUSSES
PIERCING TRUSSES
ANGLE
FINAL PLATES
PATCH PLATES
PLATES
CONNECTION PLATES
TYP EACH FLAT


SEE DETAIL
PATCH PLATES
PATCH PLATES ON BOTTOM
DETAIL "A"
DETAIL "C"
SECTION "E"
DETAIL "F"
NOTCH
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET FULL THROAT


6-6-69 AS NOTED
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. 8 FLOORS 39-40 (N&S)
BLDG. 8 FLOORS 39-40 (EAST & WEST)
FABRICATED BY LACLEDE STEEL COMPANY
DESIGN DRAWING
DRAWN BY
CHECKED BY
APPROVED BY

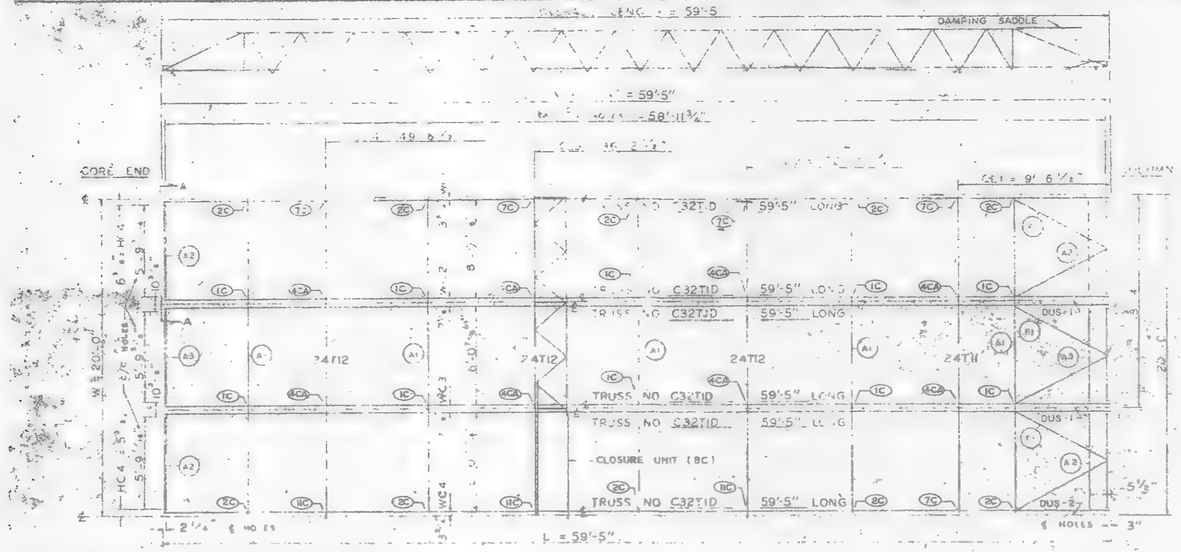
59'-8"

59'-8" LONG

59'-8"

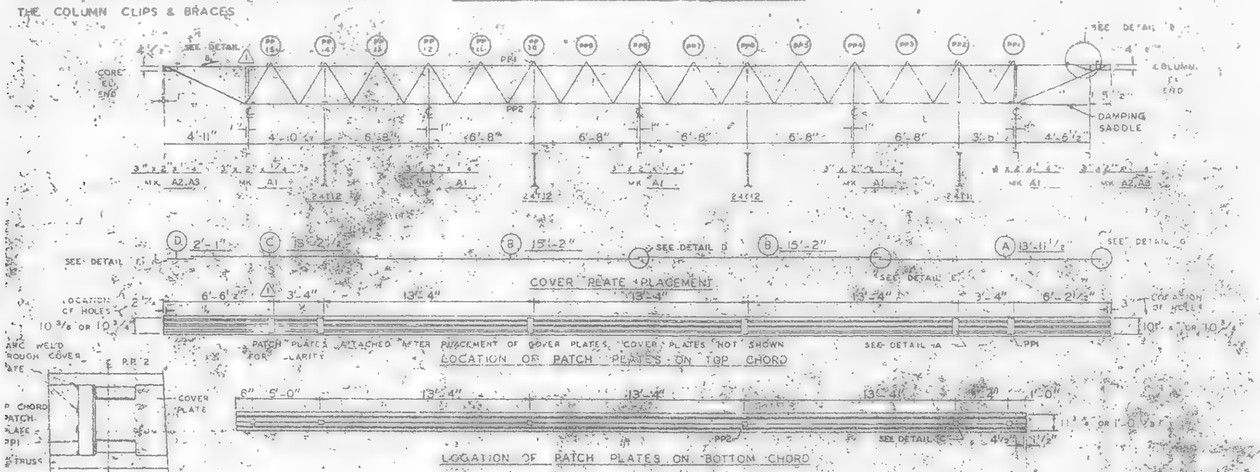
59'-8"

59'-8"

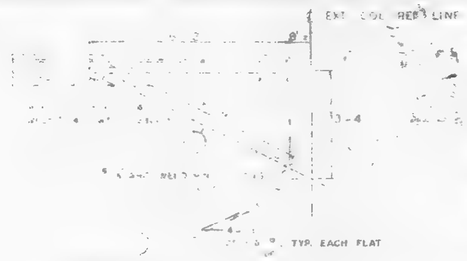


& DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE & ON THE COLUMN CLIPS & BRACES

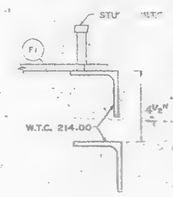
PANEL NO C1D SIZE 20'-0"x59'-5"



NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ⅛" FILLET.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BEFORE SLAB



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR PANEL

MATERIAL	MK	PCS	SIZE	SPEC
FLOOR TRUSSES	T1D	6	C32T1D 59'-5"	ST200
BRIDGING TRUSSES	T1H	1	24T1H 18'-11"	ST211
	T12	3	24T12 - 18'-11"	ST212
ANGLE	A1	18	8"x2"x¼"x 1'-8"	ST 403
	A2	4	3"x2"x¼"x 0'-5"	ST 403
	A3	2	3"x2"x¼"x 0'-5"	ST 403
DIAGONAL FLATS	F1	6	1⅛"x 4"x 0'-8"	ST 402
PATCH PLATES	PP1	18	2"x¼"x 0'-8"	ST 400
	PP2	48	3"x¼"x 0'-3"	ST 400
COVER PLATES	A	3	9"x0.135"x 1'-1½"	ST303
	B	6	9"x0.135"x 15'-2"	ST303
	C	3	9"x0.135"x 1'-2½"	ST303
	D	3	9"x0.135"x 2'-1"	ST303
ANGLE CLIPS	C1	24	2"x1½"x¼"x0'-6"	ST 400
¾" Ø SHEAR ANCHOR	SA2	9	¾" Ø STUD x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅞"x3'-6⅞"	ST299
	DUS-2	1	3½"x3½"x⅞"x3'-6⅞"	ST299
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x1¼"x 1¼" x 230 x 6'-6½"	BT212 CD204
CONNECTION PLATES	P1	5	3½"x ⅜"x 0'-6½"	ST 400
	P2	4	4½"x .38"x 1'-0"	ST 400
	P3	1	4½"x .38"x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GD

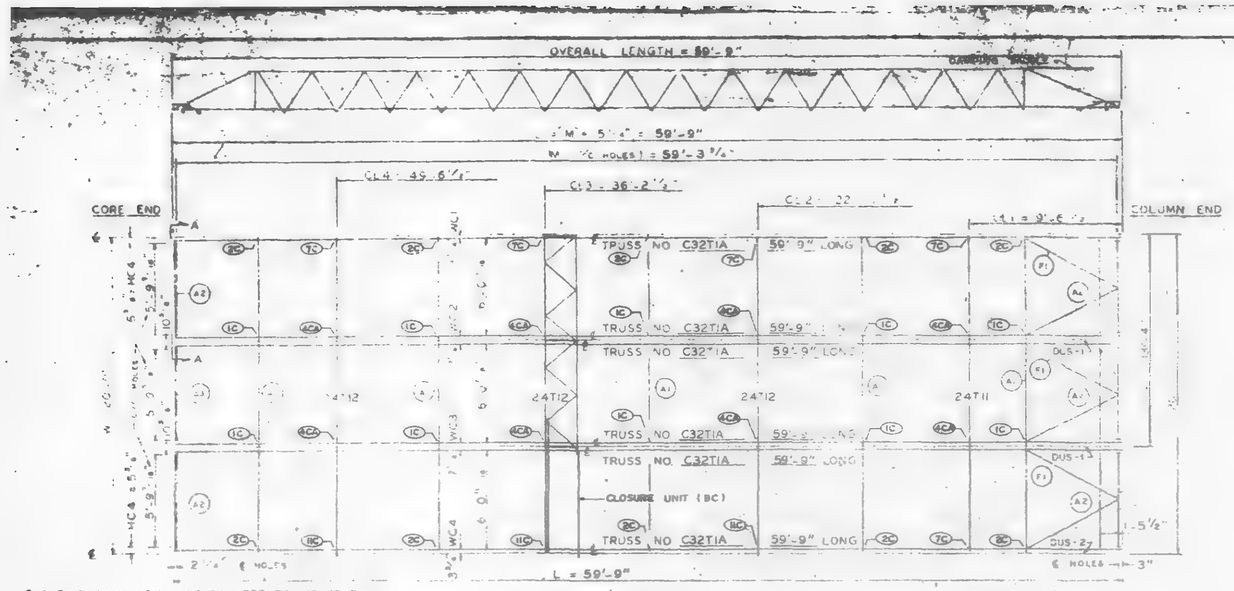
REF DRWG

7-AB4-3,31	10-15-68
7-AB4-15,16	7-22-68
1 7-AB4-39,41	7-22-68
SA-12 47	1-6-69
1 7-AB3-2	1-3-69
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-12	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

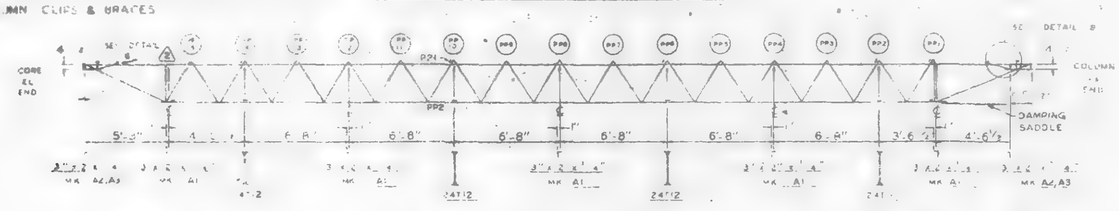
BLDG A FLOORS 81-82 (N)
PANEL 1D
BLDG B FLOORS 81-82 (WEST) 1

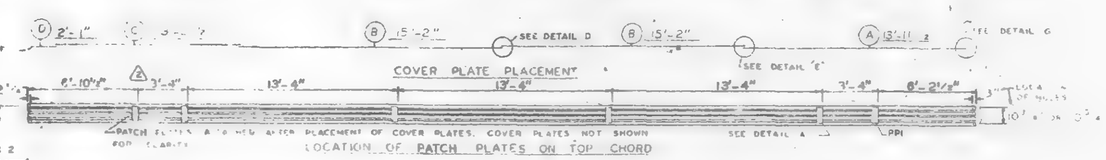
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-A93-7 SHEETS
APPROVED FOR FABRICATION DATE 2-24-68 DRAWN BY T.M.C.
APPROVED FOR ERECTION DATE 2-24-68 CHKD BY

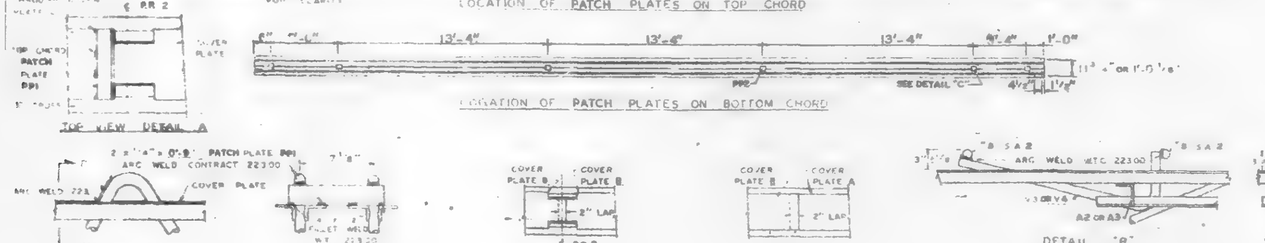


℄ & DIMENSION MC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

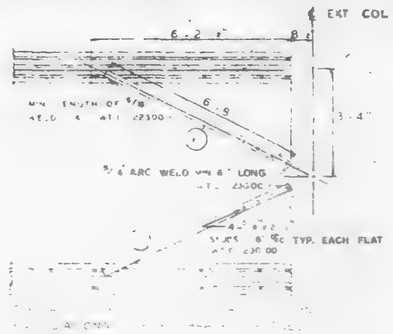
PANEL NO C1A SIZE 20'-0" x 59'-9"







NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16 FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/16" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	REF DWGS
FLOOR TRUSSES	T1A	6	[illegible]	ST2018
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	ST2018
	T12	3	24T12 - 19'-11"	ST2018
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4"x 4'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11"	ST 403
	A3	2	3"x2"x1/4"x 5'-11"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 3"x 0'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1 1/4"x 0'-9"	ST 400
	PP2	18	8"x 5/8"x 0'-3"	ST 400
COVER PLATES	A	3	8"x.035"x 13'-11 1/8"	ST303
	B	18	8"x.035"x 16'-2"	ST303
	C	3	8"x.035"x 13'-2 1/8"	ST303
	D	3	8"x.035"x 2'-1"	ST303
ANGLE CLIPS	C1	24	3"x1 1/2"x 1/4"x 0'-6"	ST 400
7/8 DIA ANCHOR	SA2	12	7/8 REBAR x 0'-8"	ST-400
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 5/8"x 3'-6 7/8"	ST 298
	DUS-2	1	3 1/2"x3 1/2"x 5/8"x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 3" - 3"	ST 400
CLOSURE UNIT	BC	3	2'-1 1/16" x 5/16"x [illegible]	ST 298
			230 x 6'-8 1/8"	[illegible]
CONNECTION PLATES	P1	9	3/16"x 2"x 0'-6 1/8"	ST 400
	P2	4	6"x 3/8"x 0'-6"	ST 400
	P3	1	6"x 3/8"x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	6-5-68	AS NOTED	G.B.C.
1	7-17-68	GENERAL	T.M.C.

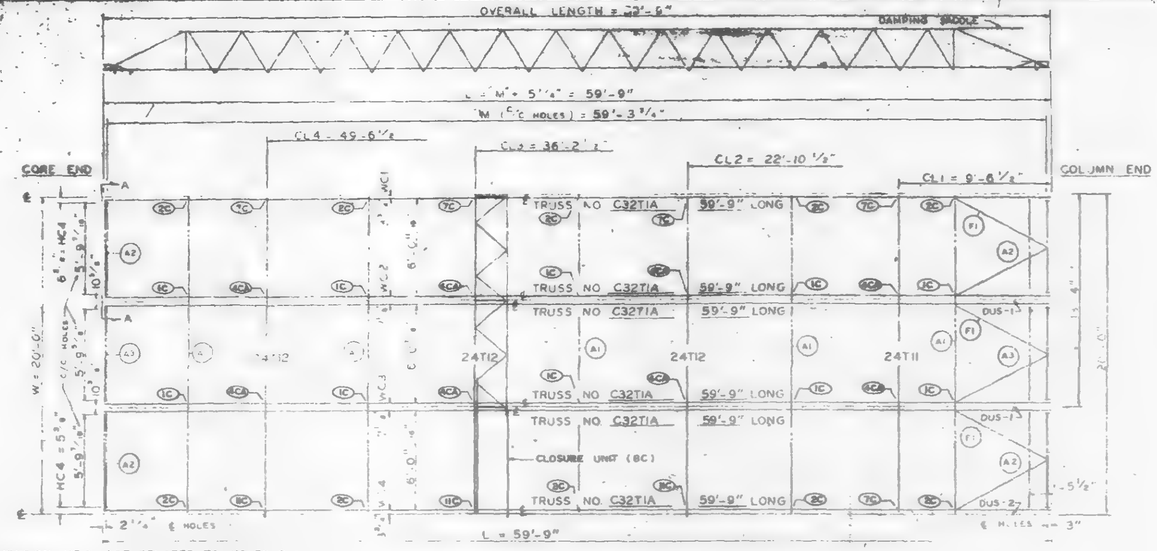
2 REF DRWG

7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-124	1-8-68
7-AB3-2	1-3-68
7-AB1-2	7-22-68
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

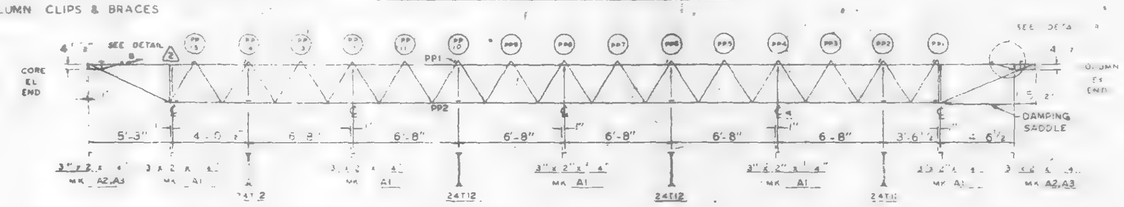
BLDG. A FLOORS 7-24, 26-38 (NORTH & SOUTH) 49-54, 60-66, 68 NORTH
PANEL C1A - 7" x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-56, 60-66 (INCL.)

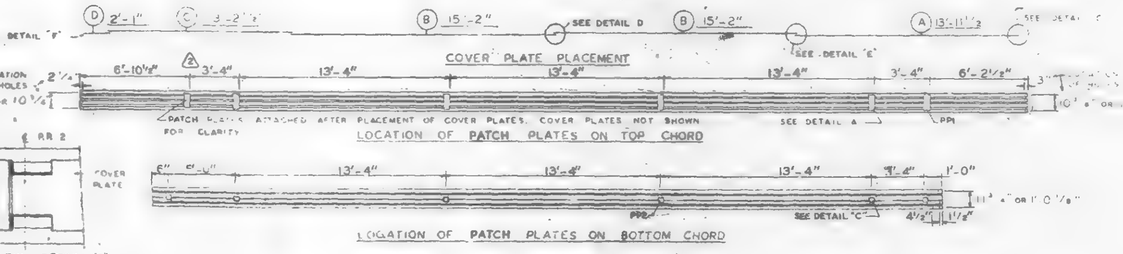
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
SHOP DRAWING NO. 3-ED-7
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
APPROVED FOR FABRICATION BY [illegible] DATE [illegible]
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY [illegible] DATE 10-1968
FABRICATOR'S CONT. NO. [illegible]

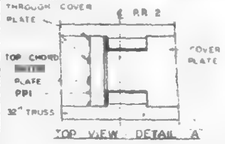


℄ & DIMENSION HC4 ARE RELATED TO HOLES P-11 IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

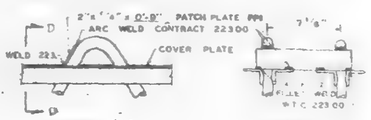
PANEL NO. C1A SIZE 20'-0" x 59'-9"





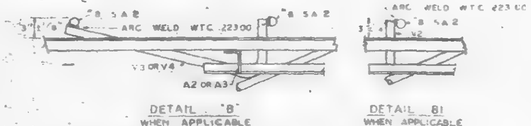


TOP VIEW DETAIL A

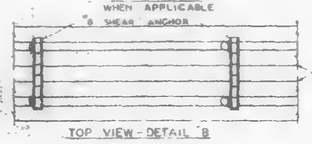


DETAIL "A" SECTION D-D

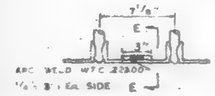
DETAIL "D" DETAIL "E"



DETAIL "B" WHEN APPLICABLE DETAIL B1 WHEN APPLICABLE



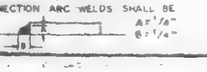
TOP VIEW - DETAIL "B"

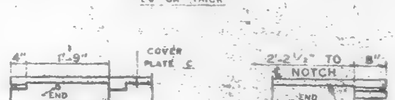


DETAIL "C"

SECTION E-E

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 "SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 2" FULL THROAT FILLET.



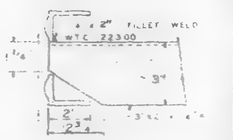


DETAIL "F" DETAIL "G"

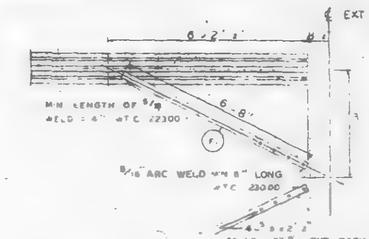
COVER PLATES 20 GA. THICK

FIELD PUNCH COVER PLATES OVER END STIFFENERS W/ 8 PUNCHES

SECTION A-A
END SUPPORT ANGLES



DETAIL J
END SUPPORT ANGLE ATTACHMENT



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG.
FLOOR TRUSSES	T1A	6	C32T1A to 40'-9"	ST 201 A
BRIDGING TRUSSES	T1I	1	24T12 - 19'-11"	BT 211
	T12	3	24T12 - 19'-11"	BT 212
3"x2"x1/4" ANGLE	A1	8	3"x2"x1/4" x 10'-11"	ST 403
	A2	4	3"x2"x1/4" x 5'-11 9/16"	ST 403
	A3	2	3"x2"x1/4" x 5'-11 9/16"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 1/4" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
ANGLE		21	2 1/2" x 2" x 4" x 0'-5"	ST 400
"B" SHEAR ANCHOR	SA2	12	"B" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/4"	ST 298
	DUS2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/4"	ST 298
CONNECTION BAR	CB1	6	1 1/2" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	24"x1 1/2"x 1 1/4"x	BT 212
			230" x 6'-8 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .36" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
2	6-5-69	AS NOTED	G.D.C.
1	7-17-68	GENERAL	T.M.C.

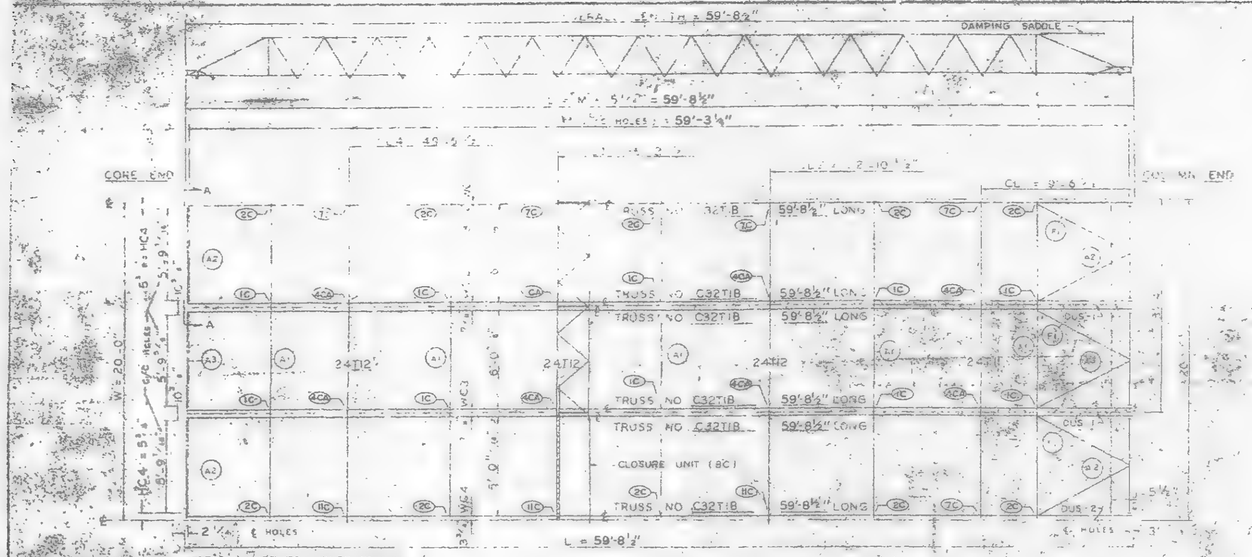
REFERENCE DRAWINGS

ARCH.	1-15-68
AMS 5525	7-24-68
AMS 41	7-24-68
A 24	1-15-69
A283	1-3-68
API 2	7-26-68
ASTM 5 & 7	7-26-68
ASA 42	10-15-68

PANYNJ PANEL PIER 5
AIRTRAIN CENTER N.Y.C.
THE PORT OF NEW YORK AUTHORITY

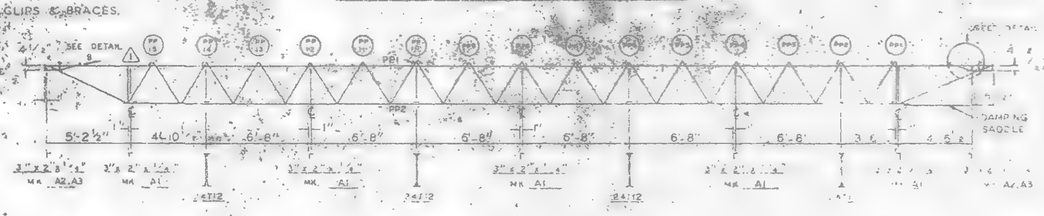
BLDG A FLOORS 14, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68
DESIGN PANEL SIZE 20'-0" X 59'-9"
BLDG B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST)

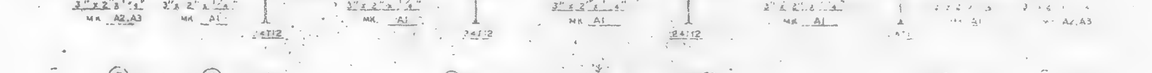
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-7 PLATE
APPROVED FOR FABRICATION BY [illegible] DATE 1/2/70
APPROVED FOR ERECTION BY [illegible] DATE
DRAWN BY [illegible] DATE APRIL 10, 1968
CHECKED BY J.R. PAUL DATE APRIL 10, 1968
IN CHARGE OF PROD. DEV.
FABRICATION CONT. NO. WT 221
SHEET NO. FP C1A



1. DIMENSION "C4" ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE "C" ON THE COLUMN CLIPS & BRACES.

PANEL NO C1B1 SIZE 20'-0" x 59'-8½"

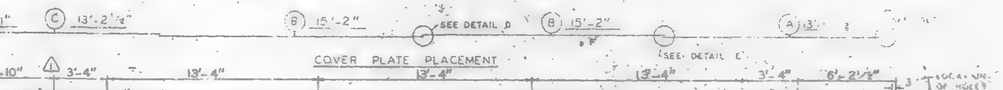




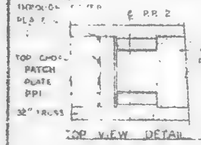
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

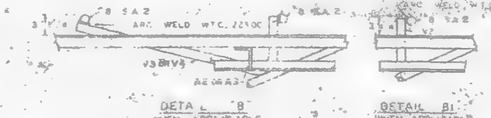


LOCATION OF PATCH PLATES ON BOTTOM CHORD

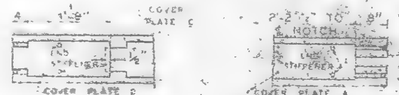


TOP VIEW DETAIL A

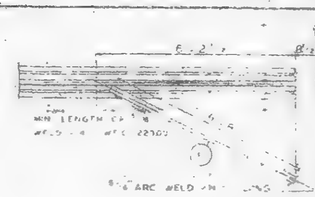
COVER PLATES ⅜" GA THICK



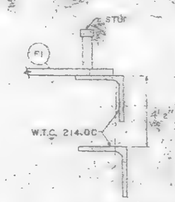
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE FLANGE ON EQUAL LEGS OF ANGLES. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.



FIELD PUNCH COVER PLATES OVER



TYPICAL PLAN OF TOP CHORD SECTION END DIAGONAL TRUSS BRACES AND COVER DECK BY "WT" 23100



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMNS. CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1B	8	C32T1B 59'-8½"	TB
	A1	5	3"x3"x¼"x 6'-11"	ST 400
	A2	4	3"x3"x¼"x 6'-11"	ST 400
	1B	1		ST 400
	2B	1		ST 400
COVER PLATES	A	3	9"x 0'-3"	ST 400
	B	6	5"x 14'-1"x 5/16"	ST 400
	C	3	9"x 14'-1"x ⅜"	ST 400
	D	3	9"x 13'-7"x ⅜"	ST 400
	E	3	9"x 13'-7"x ⅜"	ST 400
ANGLE CLIPS	C1	21	2"x4"x ¼" x 0'-5"	ST 400
⅞" SHEAR ANCHOR	SA2	12	⅞" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	8	3⅛"x 3½"x ⅞"x3'-6⅞"	ST 295
	DUS-2	1	3⅛"x 3½"x ¾" x 3'-8⅞"	ST 295
CONNECTION BAR	CB1	4	1 ⅝" x 1'-3"	ST 400
CLOSURE UNIT	8C	3	2-4x1½"x ¼"x 230 x 8'-6½"	ST 212 QD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-0⅛"	ST 400
	P2	4	4⅛" x .38" x 0'-9"	ST 400
	P3	1	4⅛" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie, (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

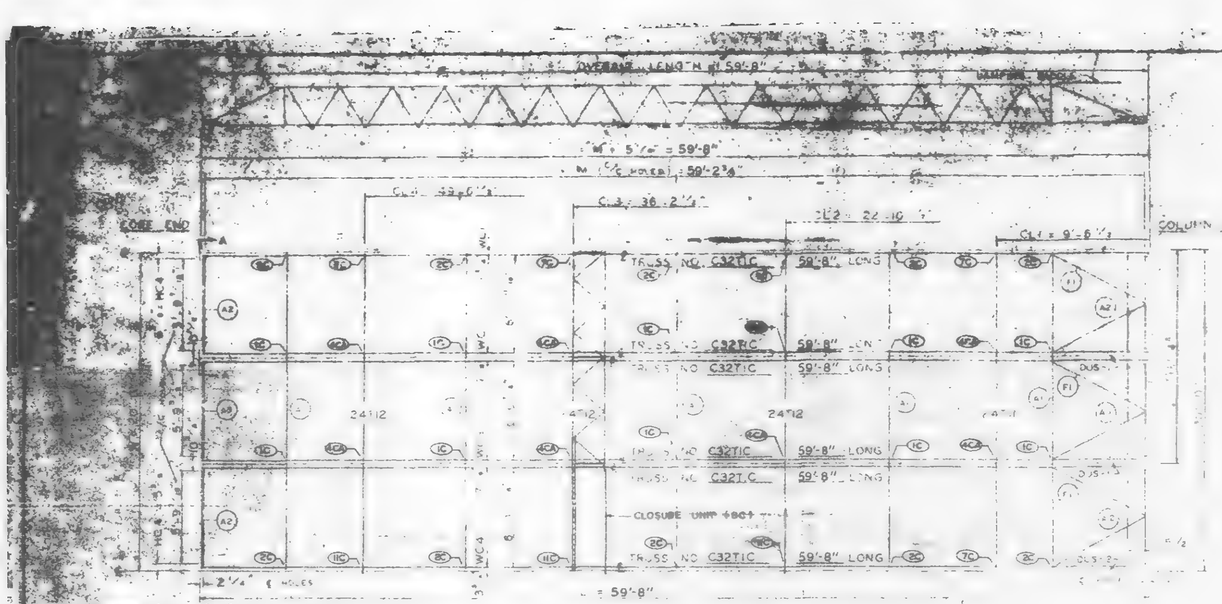
NO.	DATE	REVISION	BY
1	6-5-69	AS NOTED	GDL

AB4-1	10-15-68	
AB4-1 & 1B	7-22-68	
AB4-39 & 41	7-22-68	
SA 124	7-6-68	
AB3-2	7-22-68	
AB1-E	7-22-68	
AB2-6 & 7	7-22-68	
AB4-42	10-15-68	

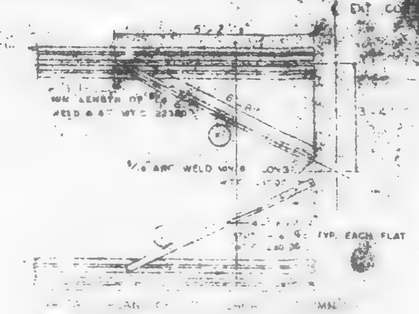
BLDG. B FLOORS 83-91,93-106 (WEST) 1

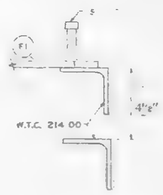
PANEL C1B1 x 59'-8½"

APPROVED BY [illegible]	DATE	DESIGN DRAWING NO. 1-685.2	PLATE
APPROVED BY MADISON, ILLINOIS James V. Hecker	DATE 1/9/70	DRAWN BY [illegible] DATE 0-24-68	
APPROVED FOR FABRICATION	DATE	CHECKED BY T.M. CHURAN IN CHARGE OF DATE 10-24-68	
FOR FABRICATION		FABRICATION CONT. NO.	



(IC) & (2C) DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BOLT HOLES EXACTLY ALIGNED WITH HOLE (IC) ON THE COLUMN CHRS & BRACES.

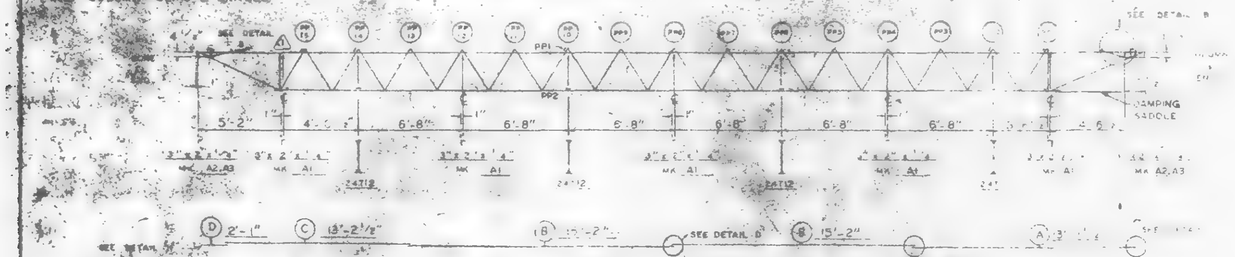


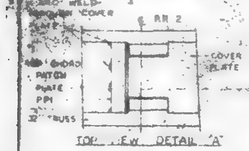


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

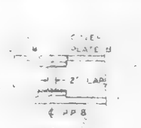
ASSEMBLED MATERIAL PER PANEL				
MARK	MK	PCS	SIZE	WT
TOP CHORD	TC	1	PANEL 59'-8"	ST 400
BRIDGING TRUSSES	T1	1	24"@12" 18'-11"	ST 212
	T2	3	24"@12" 18'-11"	ST 212
3"x2½"x5/16" ANGLE	A1	8	3"x2½"x5/16" x 18'-11"	ST 400
	A2	4	3"x2½"x5/16" x 18'-11"	ST 400
	A3	2	3"x2½"x5/16" x 18'-11"	ST 400
DIAGONAL FLATS	F1	8	4" x 6'-0"	ST 400
PATCH PLATE	PP1	18	5'-0"	ST 400
	PP2	18	3'	ST 400
				ST 303
		6	5'-2"	ST 304
			3'-2"	ST 304
			2'-11"	ST 303
			3'-3"	ST 400
	SA2	12	6'-9"	ST 400
			3'-6⅞"	ST 298
			3'-6⅞"	ST 298
	CA1	4	3'-3"	ST 400
FLANGE NUT			2"x1¼"x¼"	BT 212
			5/8"	CD 304
CONNECTION PLATES	P1	5	3" x 8" x 0'-8"	ST 400
	P2	4	4" x 39" x 0'-9"	ST 400
	P3		4" x 39" x 1'-0"	ST 400

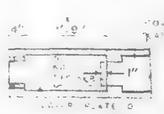
PANEL A1D C1C SIZE 20'-0"x59'-8"

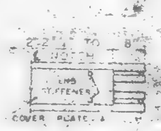




NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-90 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THICKNESS FILLET.





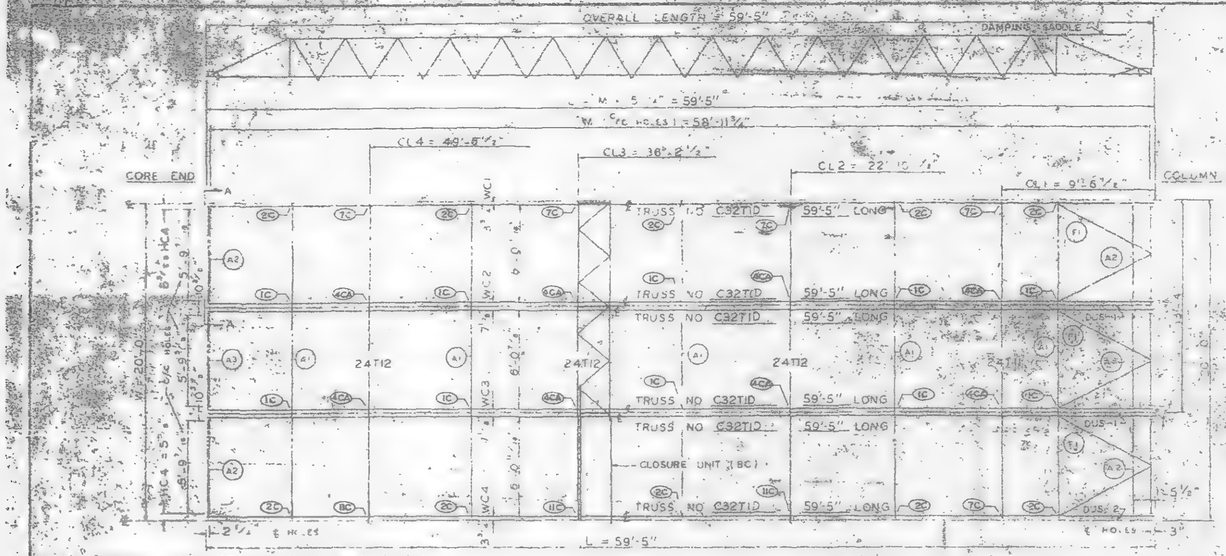


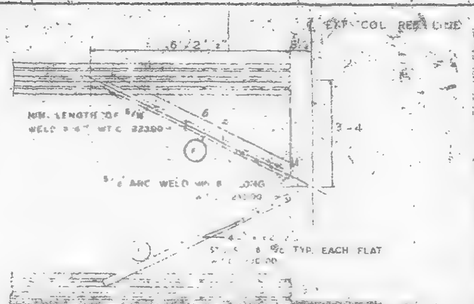
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GDC
2	10-5-69		
3	12-22-69		
4	1-6-69		
	10-15-68		

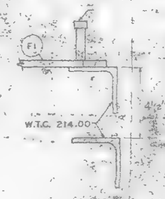
BLDG. 8 FLOORS 49-58, 60-74, 79-91, 93-106 (EAST)

DESIGN INSIGNIS	DESIGN NUMBER AB3
APPROVED FOR FABRICATION BY [illegible]	DRAWN BY [illegible]
APPROVED FOR FABRICATION BY [illegible]	CHECKED BY [illegible]
	FABRICATION CONTROL NO.





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W T C 223 00

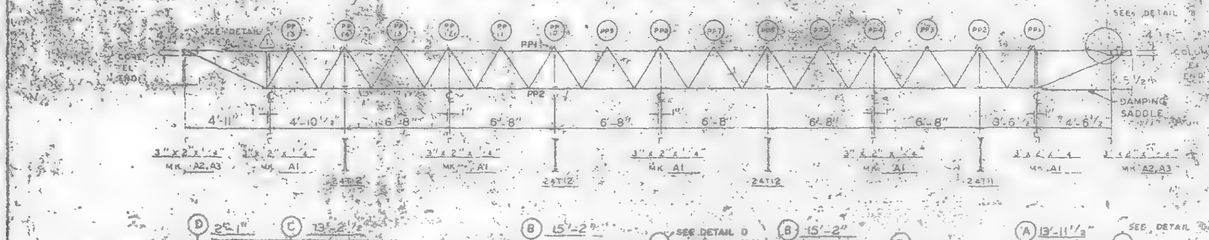


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR PANEL				
MATERIAL	MK	PCS	SIZE	WC
FLOOR TRUSSES	T1D	6	C32TID 59'-5"	ST2CID
BRIDGING TRUSSES	T1	1	24T12 - 19'-11"	BT212
	T12	3	24T12 - 19'-11"	BT212
ANGLE	A1	5	3 1/2" x 3 1/2" x 1/4" x 19'-11"	ST 403
	A2	4	3 1/2" x 3 1/2" x 1/4" x 5'-6"	ST 403
	A3	2	3 1/2" x 3 1/2" x 1/4" x 5'-6"	ST 403
DIAGONAL FLATS	F		1/2" x 6" x 6'-9"	ST 402
PATCH PLATES	PP1	18	2" x 0'-9" x 0'-9"	ST 400
	PP2	48	1/4" x 6" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-1 1/2"	ST303
	B	6	9" x 0.135" x 15'-2"	ST303
	C	3	9" x 0.135" x 13'-2 1/8"	ST303
	D	3	9" x 0.135" x 2'-1"	ST303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
3/4 ø SHEAR ANCHOR	SA2	9	3/4 ø REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/8" x 8 1/2" x 3/8" x 31.6 7/8"	ST 298
	DUS-2	1	3/8" x 3 1/2" x 3/8" x 9'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1/2" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1/4" x 230 x 0'-6 1/2"	BT212 CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/16" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

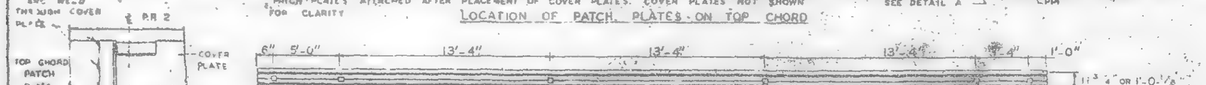
& DIMENSION WC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE C ON THE COLUMN CLIPS & BRACES.

PANEL NO C1D SIZE 20'-0" x 59'-5"



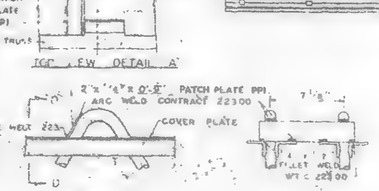
COVER PLATE PLACEMENT

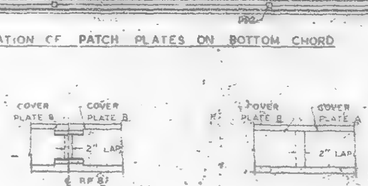
LOCATION OF PATCH PLATES ON TOP CHORD

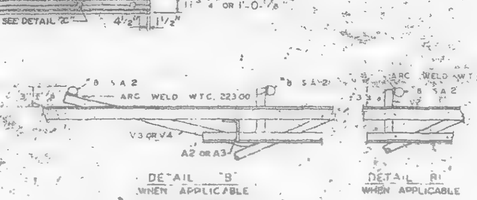


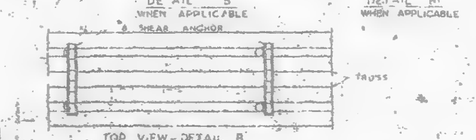
LOCATION OF PATCH PLATES ON BOTTOM CHORD

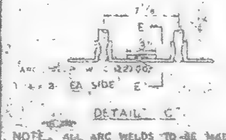
TOP VIEW DETAIL A



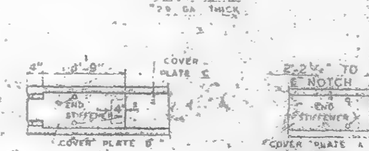


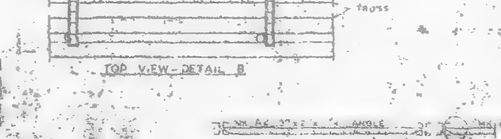






NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" x 1" FULL THROAT FILLET





LETTERS AND NUMBERS IN ELLIPSES IN (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GDI

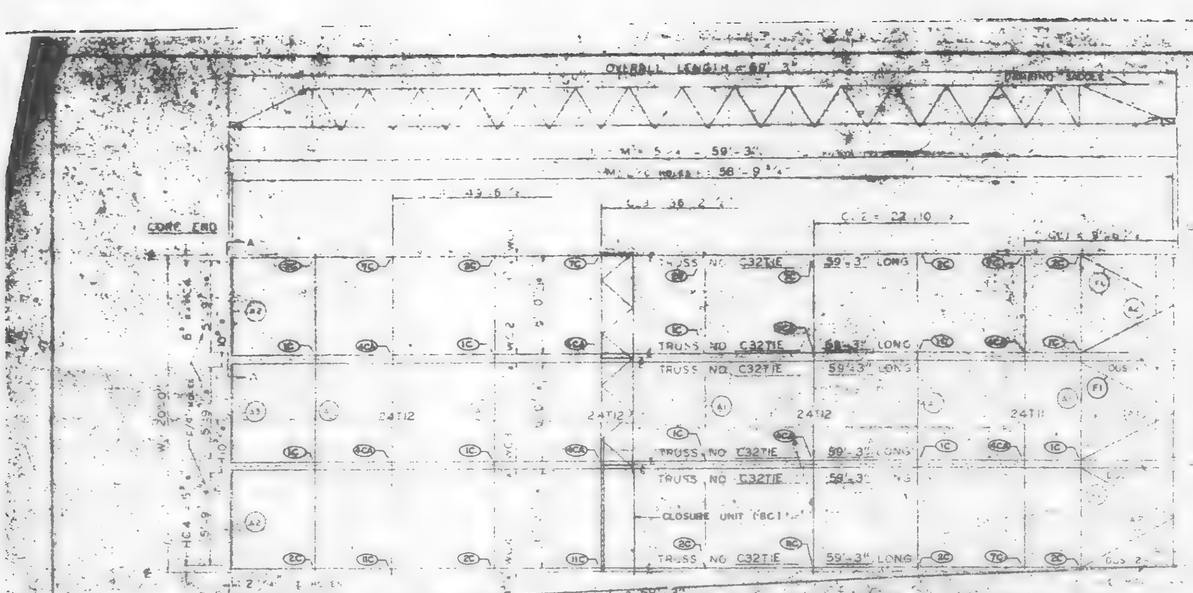
REF DRWG
- A84-3&1 10-15-68
- A84-15 & 6 7-22-68
- ⚠ A84 39 & 41 7-22-68
- SA 124 1-6-69
- A84-2 1-3-68
- A84-2 7-22-68
- A84-2 7-22-68
- A84-32 10-15-68

FOR PANEL C 1 D
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 81-82 (N)
PANEL C1D 20'-0" x 59'-5"
BLDG B FLOORS 81-82 (WEST) ⚠

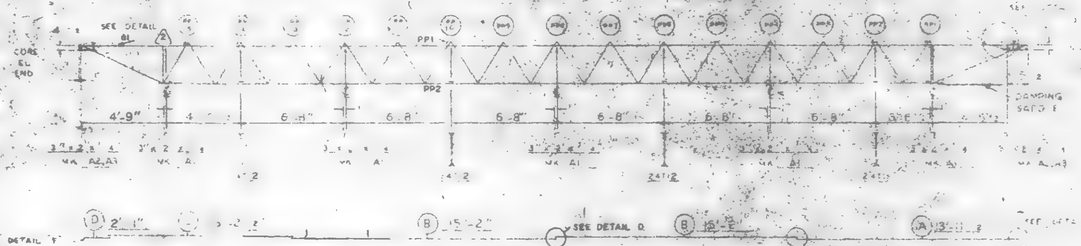
FABRICATION BY LACLEDE STEEL COMPANY

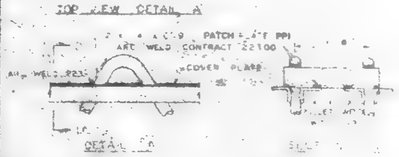
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO A84-2 SHEET
APPROVED FOR FABRICATION James Wolchanyk	DATE 1/2/70	DRAWN BY DATE 10-24-68
APPROVED FOR FABRICATION	DATE	CHECKED BY T.M. CHURAIN IN CHARGE DATE 10-24-68 PROD REV
DETAILED BY [illegible]		FABRICATION CONT NO. W.T.C. 2221 SHEET CD 201

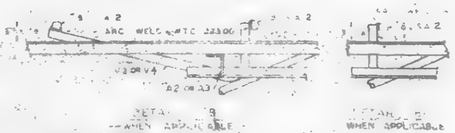


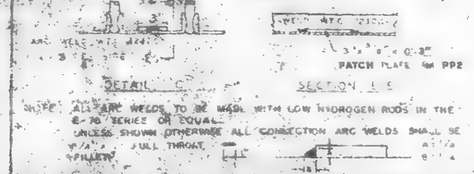
ALL DIMENSION NO 4 ARE RELATED TO HOUSE NO 4
BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH THE END OF THE COLUMN CLIPS & BRACES

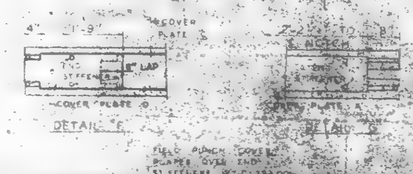
PANEL NO C1E SIZE 20'-0" x 59'-3"



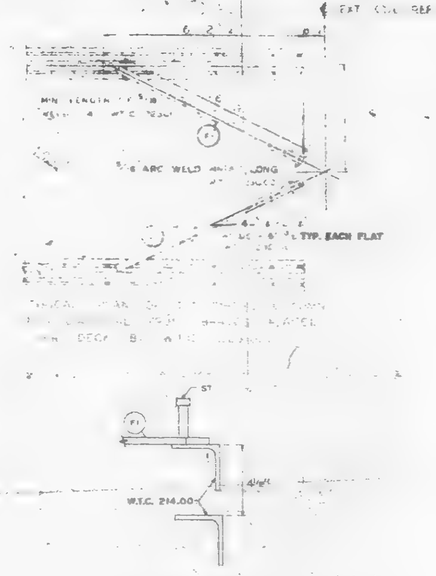








NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



REQUIRED MATERIAL ON PANEL				
MATERIAL	MK			DRWG.
TRUSSES				
	TIE	3		ST 212
				ST 403
ANGLE				ST 403
				ST 403
				ST 402
	PPI	18		ST 400
PATCH PLATES	PPP	18		ST 400
			2'-1"	ST 400
	SA2		0'-9"	ST 400
	CB'	4	1'-3"	ST 400
CLOSURE UNIT				BC2
				CL 204
CONNECTION PLATES	P1	5	3/8" x 6 1/4" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

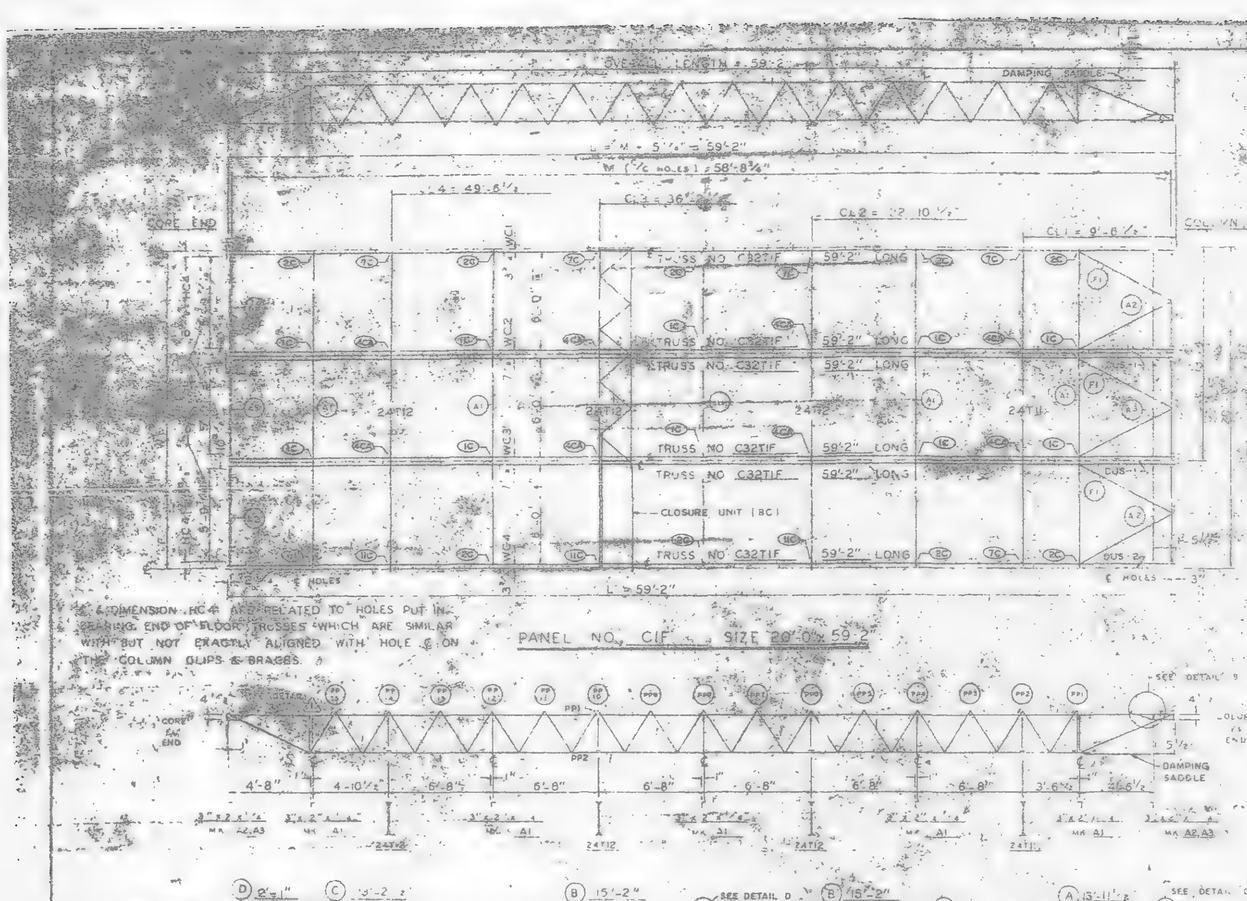
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
2	6-6-69	AS NOTED	G.D.C.
1	7-7-68	GENERAL	T.M.C.

2	10-15-68
	7-22-68
	7-22-68
	6-6-69
	7-26-68
	7-22-68
	10-15-68

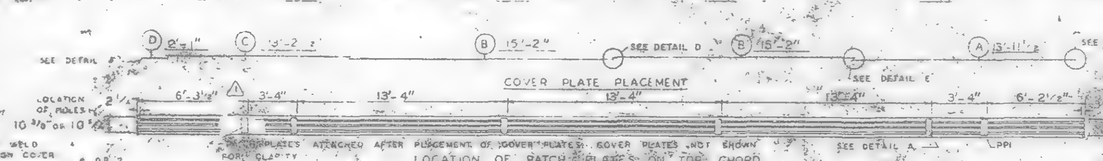
10-11 (NORTH & SOUTH)

FABRICATION BY
ERECTION BY
JAMES WHITE STEEL CO.
APPROVED FOR FABRICATION DATE
BY
APPROVED FOR ERECTION DATE
BY J.R.DAVIS
DATE APRIL 10, 1968
IN CHARGE OF
ISSUED DEV.
FABRICATION CONT NO. 221
SHEET NO. FD C1E

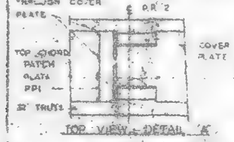


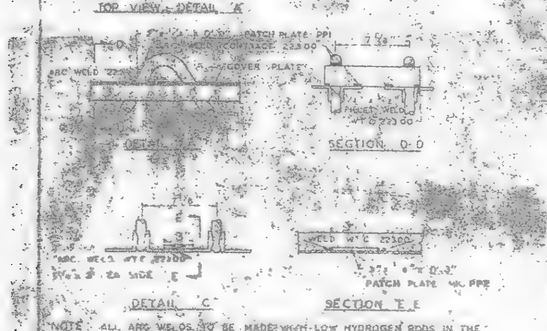
4. DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

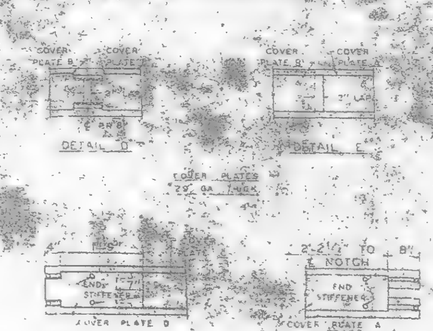
PANEL NO. C1F SIZE 20'-0" x 59'-2"

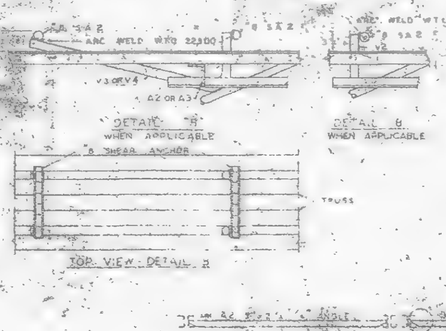


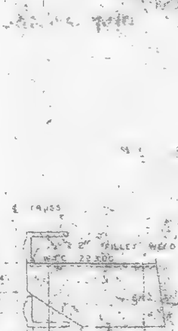
PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

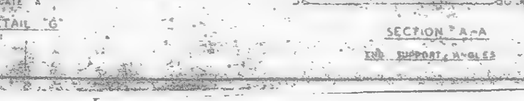




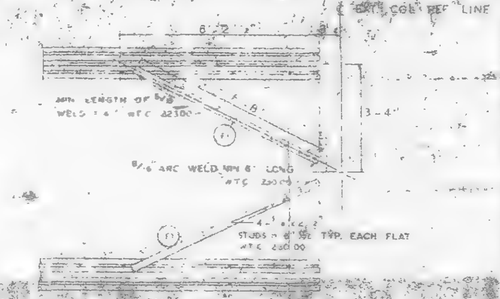


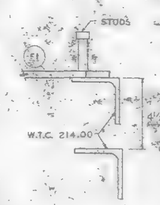






LETTERS AND NUMBERS IN ELLIPSES, ie. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204





CLIP ANGLE LOCATION FOR DIAGONAL PLATES 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR 1 PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1F	6	C32T1F 59'-2"	ST 36 F
BRIDGING TRUSSES	T1	1	24T12 - 5'-1"	ST 36 F
	T12	3	24T12 - 19'-1"	ST 36 F
ANGLES	A1	15	3 1/2" x 3 1/2" x 5/16" x 10'-11"	ST 400
	A2	4	10" x 2 1/2" x 3/8" x 10'-11"	ST 400
	A3	6	5" x 3 1/2" x 5/16" x 10'-11"	ST 400
DIAGONAL PLATES	F	6	1/2" x 8" x 8"	ST 400
PATCH PLATES	PP1	18	2" x 1 1/2" x 0'-3"	ST 400
	PP2	18	2" x 8" x 3"	ST 400
COVER PLATES	A	1	0" x .0135" x 13'-11"	ST 400
	B	1	0" x .0135" x 11'-2"	ST 400
	C	3	9" x .0135" x 13'-2"	ST 400
	D	3	5" x .0135" x 3'-1"	
ANGLE CLIPS	C1	72	8" x 4" x 1/2" x 10'-6"	ST 400
8 SHEAR ANCHOR	SA2	9	5/8" REBAR x 10'-5"	400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 5/16" x 3'-6"	ST 36
	DUS-2	1	3 1/2" x 3 1/2" x 5/16" x 3'-6"	ST 36
CONNECTION BAR	CB1	4	1" x 1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1/4" x 230 x 5'-6 1/2"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 1/2" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .30" R 0'-9"	ST 400
	P3	1	4 1/2" x .30" R 1'-0"	ST 400

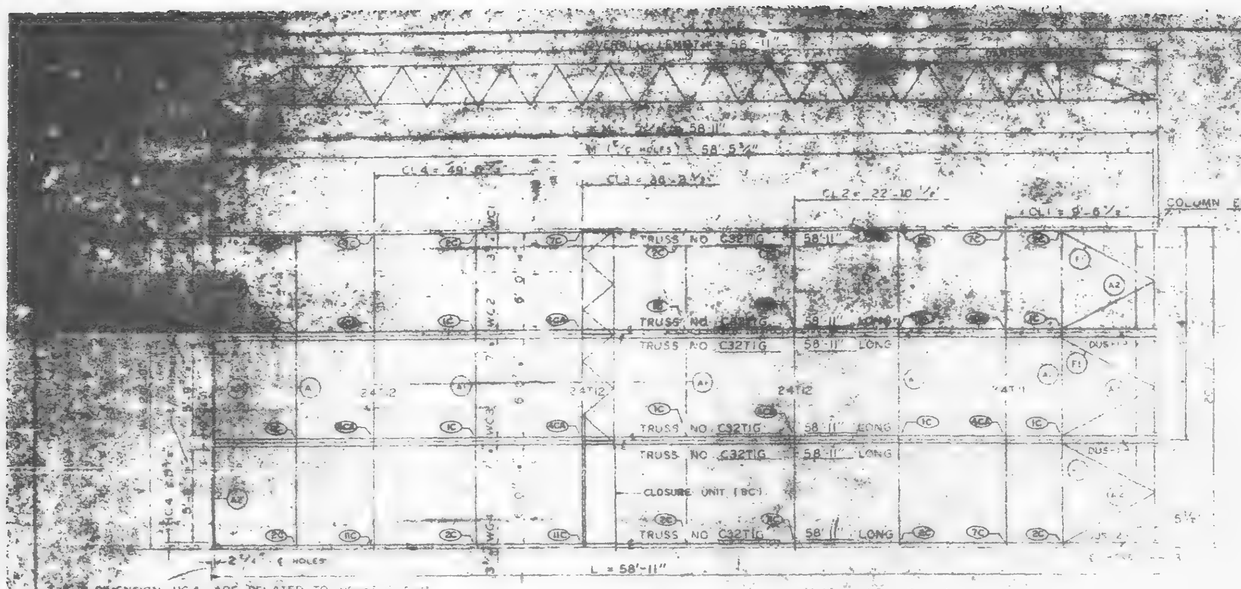
NO.	DATE	REVISION	BY
1	6-6-69	AS NOTED	GDC

REF DRWG		
1	AB4-3	10-15-68
7	AB4-19 & 18	7-22-68
7	AB4-39 & 41	7-22-68
5A	124	01-6-69
7	AB3-2	1-6-69
7	AB1-2	7-22-68
7	AB2-6 & 7	7-22-68
7	AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

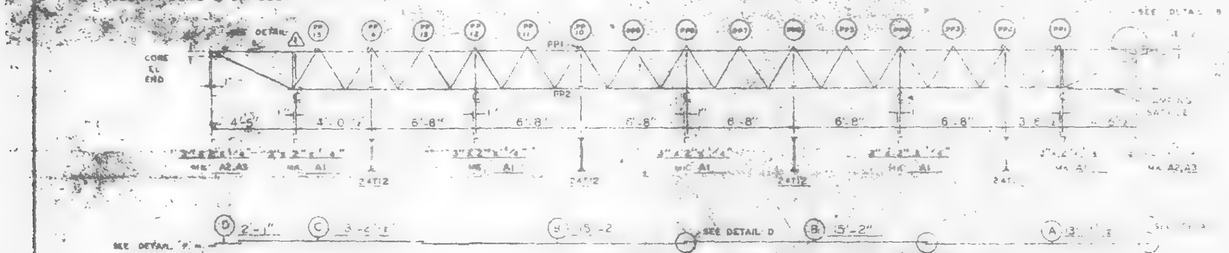
BLDG. A FLOOR 47-48 (N&S), 70-71 (N)
PANEL C1F 20'-0" x 59'-2"
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST) 1

FABRICATION BY	LACLEDE STEEL COMPANY
FABRICATED AT	MADISON, ILLINOIS
DESIGN DRAWING NO.	AB3-7
APPROVED FOR FABRICATION	DATE 1/4/70
DRAWN BY	DATE 10-24-68
APPROVED BY	DATE
CHECKED BY	DATE 10-24-68
SHOP DETAILS BY	FABRICATION CONT. NO.
ARC WELDS	WTC P01

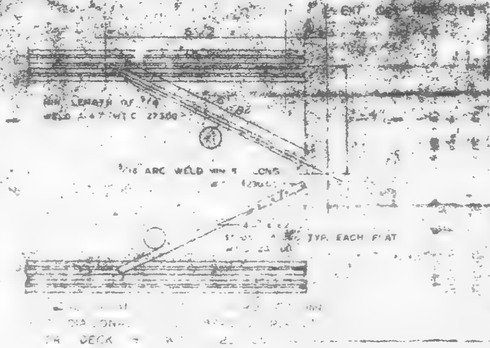


E DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES

PANEL NO C16 SIZE 20'-0" x 58'-11"



NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET THROAT WELDS.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1G	6	C32TIG 58'-11"	24T12
BRIDGING TRUSSES	T1	1	24T12 - 19'-10"	ST 402
	T2	1	24T12 - 19'-10"	ST 402
3"x2"x5/16" ANGLE	A1	3	3"x2"x5/16" x 58'-11"	ST 400
	A2	4	3"x2"x5/16" x 5'-11"	ST 400
	A3	2	3"x2"x5/16" x 11'-4"	ST 400
DIAGONAL FLATS	F1		2" x 6" x 5'-8"	ST 402
PATCH PLATES	PP1	18	2"x 6" x 0'-8"	ST 400
	PP2	18	3"x 5/8" x 0'-3"	ST 400
ANGLE CLIP			2" x 2" x 4" x 0'-6"	ST 400
			2" x 2" x 1/4" x 0'-8"	ST 290
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	1	2"x1 1/2"x 1/4" x	ST 2T12
			3'-3" x 0'-8 1/2"	C0204
CONNECTION PLATES	P1		3'-7" x 5/8" x 0'-6"	ST 400
	P2	4	4" x .39" x 0'-9"	ST 400
	P3		4" x .39" x 0'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (CC), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	BY
1	6-6-69 AS NOTED	

2	10-15-68	
1	7-22-68	
A	7-4-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 5 FLOORS 39-40 (N&S) SCALE 1" = 1'-0" DATE 5-8-68

BLDG. B FLOORS 39-40 (EAST & WEST) 1

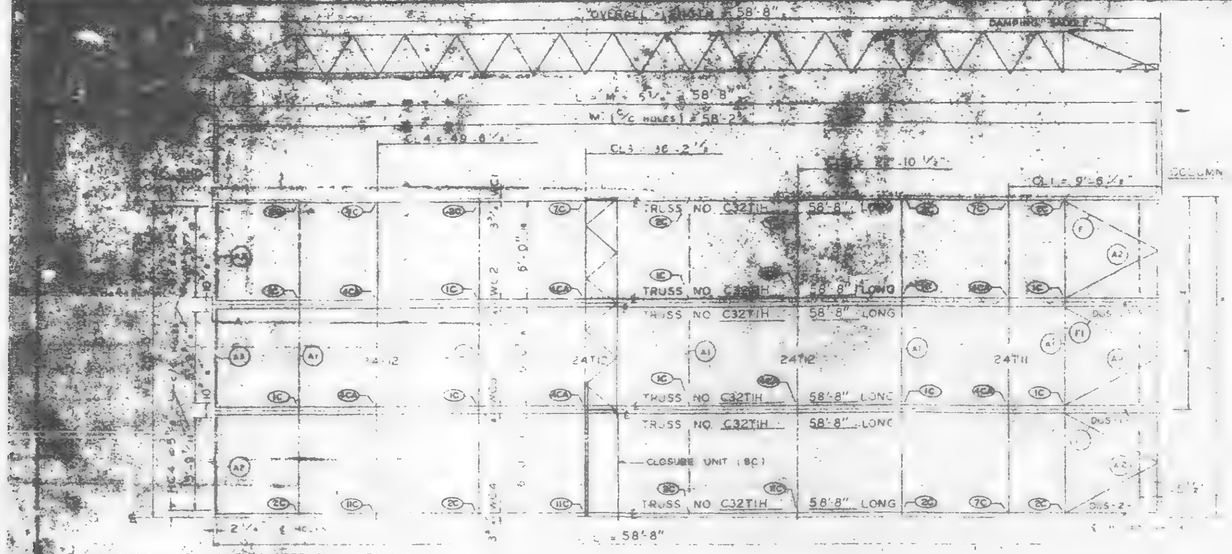
FABRICATED BY [illegible] DRAWING NO. CD 203

PANEL 5 & 6 MADISON NO. 17 PLATE 2

James White 1/2/70 24-68

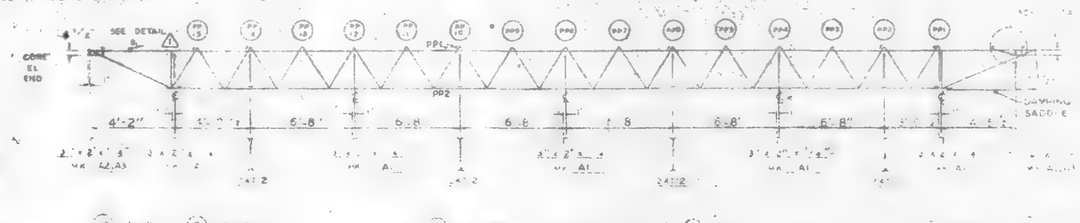
BY [illegible] 24-68 BY Y.M. CHECKED

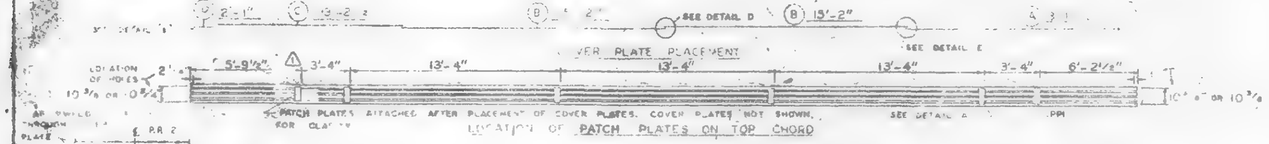
[illegible] STEEL CO. SHEET NO. 22 OF 16



℄ & DIMENSION HC4 ARE RELATED TO HOLES PAT. IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ OF COLUMN CLIPS & BRACES

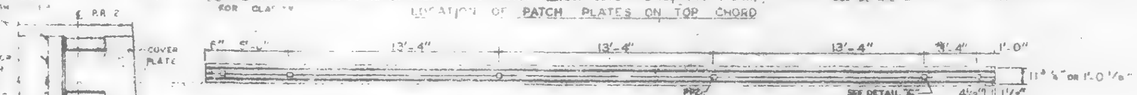
PANEL NO C1H SIZE 20'-0" x 58'-8"





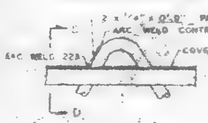
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD



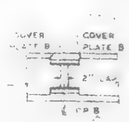
LOCATION OF PATCH PLATES ON BOTTOM CHORD

SEE VIEW DETAIL A



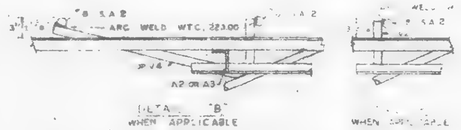
DETAIL A

SECTION



DETAIL B

DETAIL E



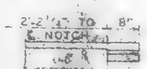
WHEN

DETAIL C

SECTION

PATCH PLATE MK PP2

DETAIL F



DETAIL G

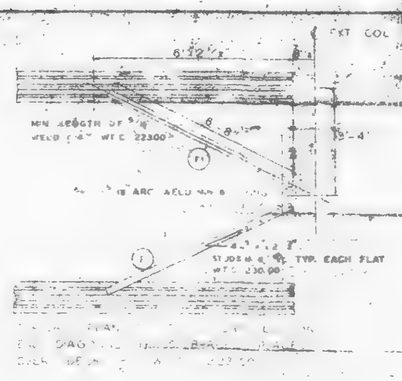
OVER PLATES ½" A THICK

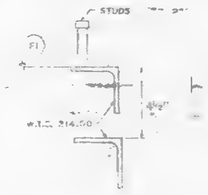
NOTE: ALL ARC WELDS TO BE MADE WITH E-X A HYDROGEN ROD IF THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE CONTINUOUS FULL THROAT FILLET.

WELD PUNCH COVER PLATES OVER END

END SUPPORT AND FS

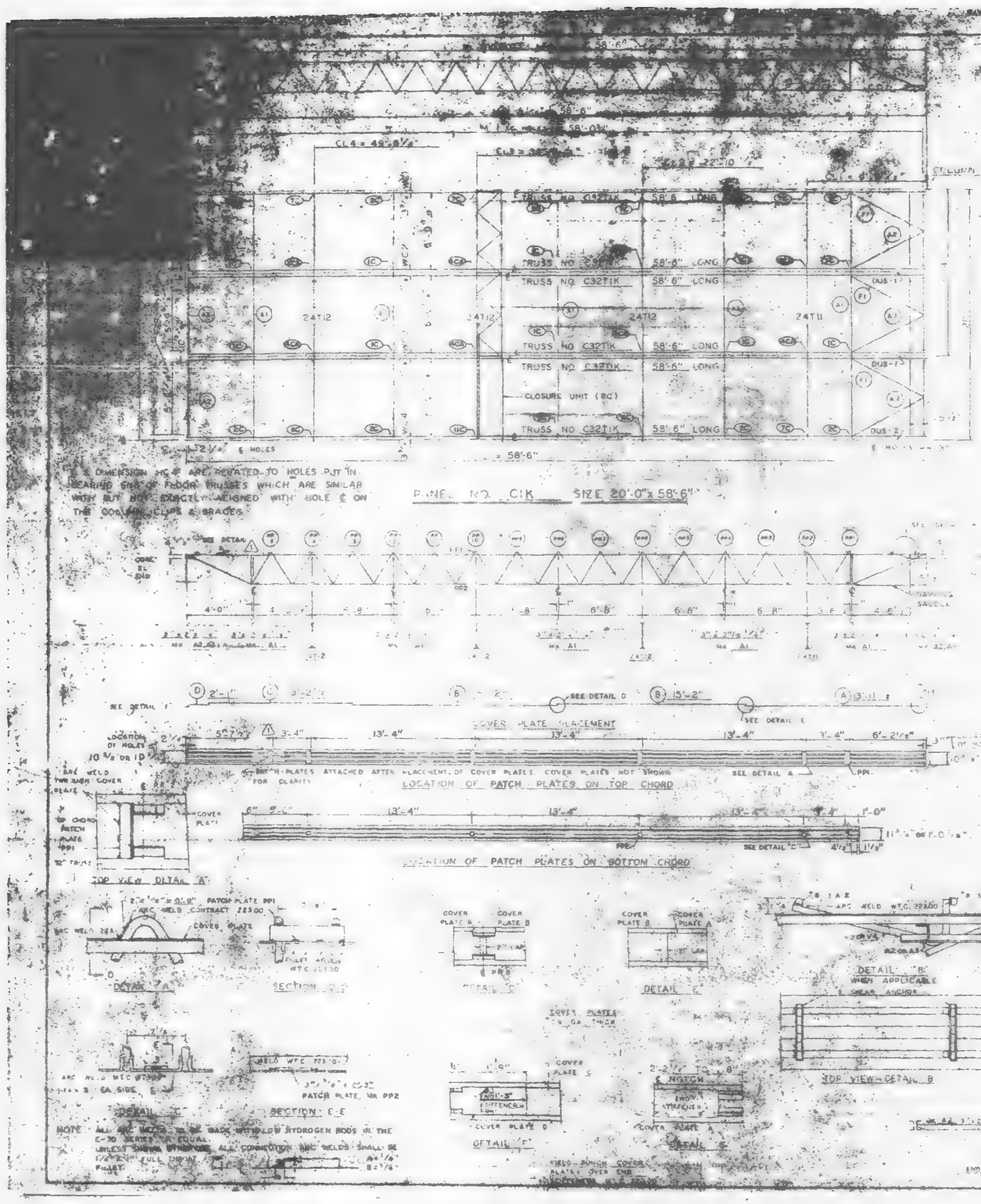
END SUPPORT AND ATTACHMENT





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL					REF DWG
MATERIAL	MK	PCS	SIZE		
FLOOR TRUSSES	T1H	5	C32T1H 58'-8"		S1200 H
BRIDGING TRUSSES	T11	1	24T11 58'-11"		ST 412
	T12	3	24T 2 10'-11"		ST 412
3 x 2½ x ¼ ANGLE	A1	5	3"X2½"X¼" x 19'-0"		ST 403
	A2	4	3 x 2½" x 4 x 5-11/16		ST 403
	A3	2	3" x 2½" x 4 x 5-11/16		ST 403
DIAGONAL PLATE	F1	2	1'-½" x 1'-4" x 0'-0		ST 402
PATCH PLATE	PP1	18	2" x 1'-4" x 0'-3"		ST 400
	PP2	18	3" x 1'-4" x 0'-3"		ST 400
					ST 400
					ST 400

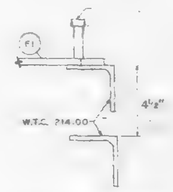


1. DIMENSIONS @ 4" ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT STRICTLY ALIGNED WITH HOLE ℄ ON THE CLOSURE, CLIPS & BRACES.

NOTE ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES U.N.O.

LETTERS AND NUMBERS IN ELLIPSES ie. (1C). INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

FLOOR TRUSSES		6	C32TIK 58'-6"	
BRIDGING TRUSSES	T11	1	24T11 - 18'-10"	ST 212
	T12	1	24T12 - 19'-11"	ST 212
3 x 2 1/2 x 1/4 ANGLE	A12	6		ST 403
	A13	5		ST 403
DIAGONAL FLATS	F	8		ST 403
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 403
	PP2	18		ST 403
COVER PLATES	A	3		ST 503
	B	6		ST 303
				ST 403
				ST 333
ANGLE CLIPS	C1	21	3" x 2 1/2" x 1/4" x 0'-6"	ST 400
END ANCHOR	SA2	9	REBAR x 0'-9"	ST 400
BEARING SADDLE	DS1	2		ST 212
CONNECTION BAR	CB1	4		ST 400
CLOSURE UNIT	BC	3		ST 212
				CU 204
CONNECTION PLATES	P1	5		ST 400
	P2	4		ST 400
	P3			ST 400



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

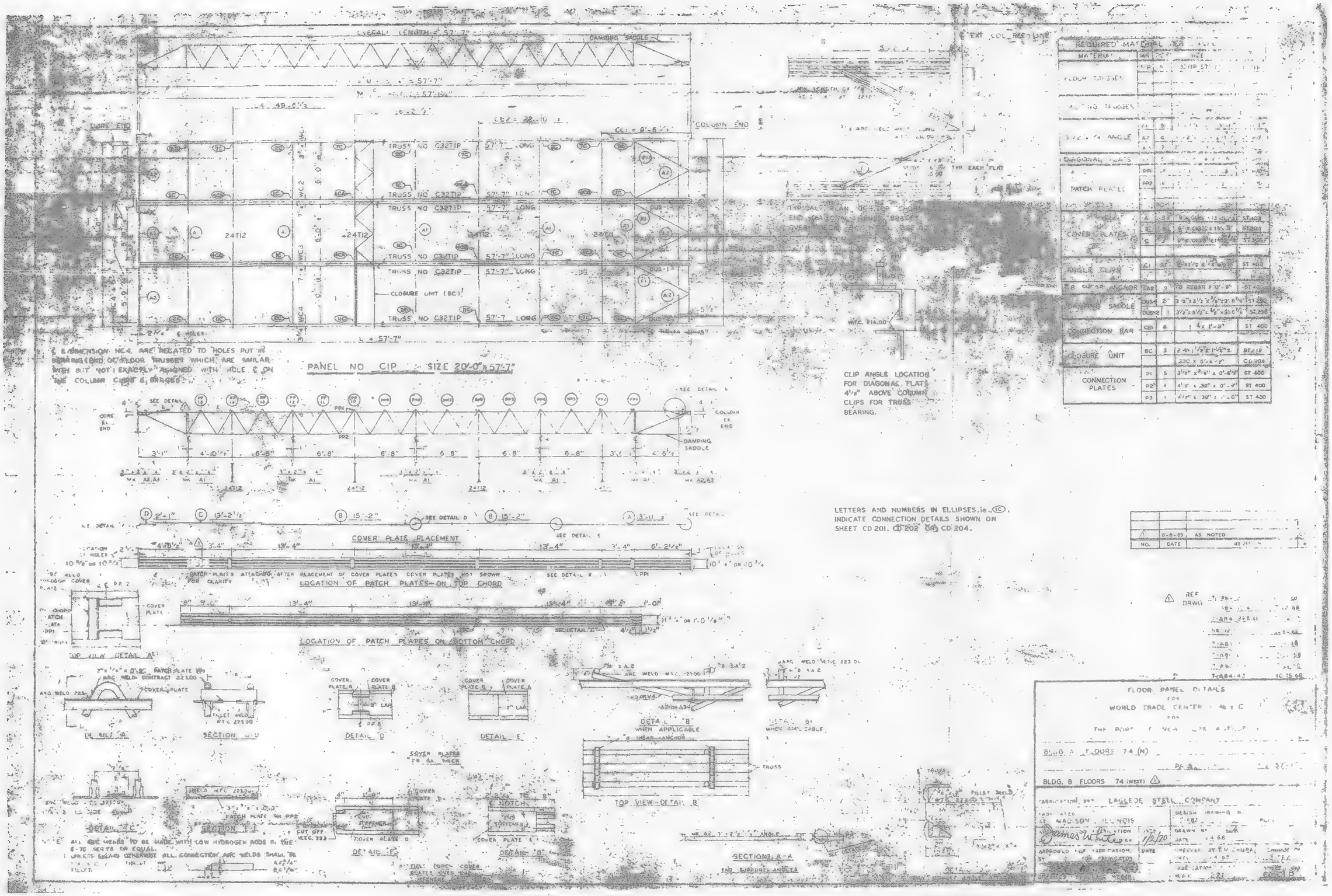
NO	DATE	DESCRIPTION	BY
1	6-6-69	AS NOTED	GDC

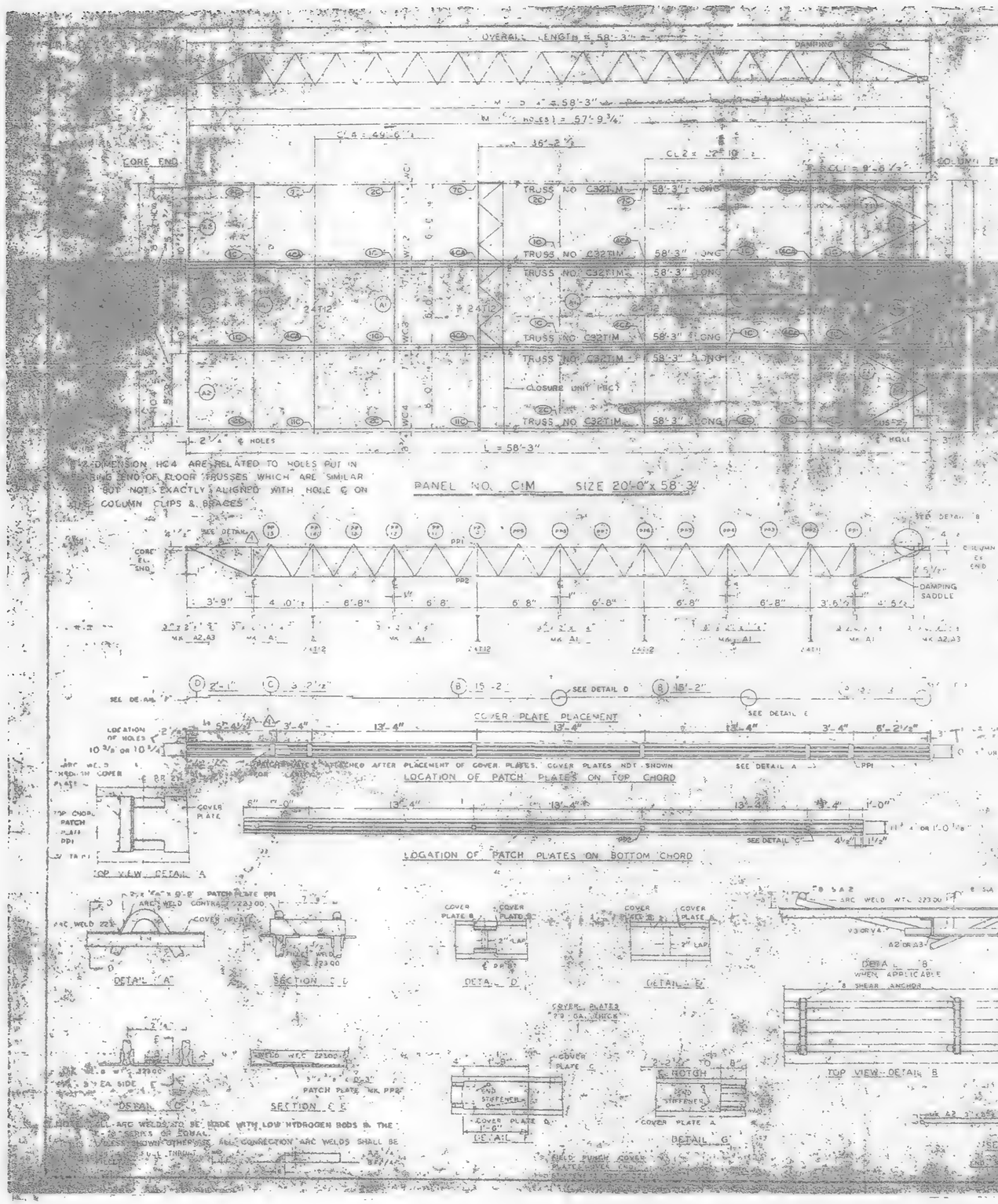
1	SEE DRAG AB4-2	10-5-68
	AB4-15 & 16	7-22-68
	AB4-39A & 41	7-22-68
	SA-270	1-6-69
	AB3	1-3-69
	AB1-2	7-22-68
	AB2 & 3	7-22-68
	AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

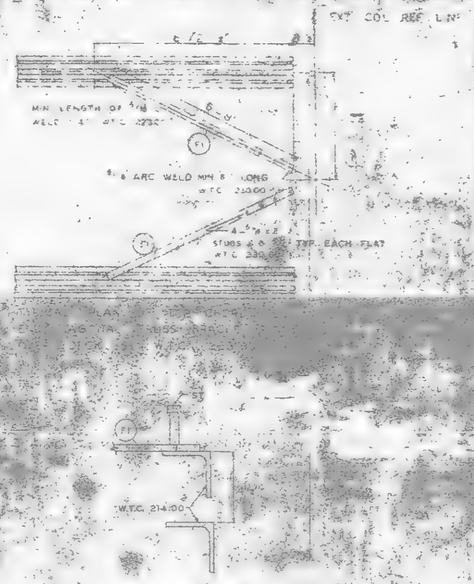
BLDG. A FLOORS 45(S), 46(N&S)
PANEL C1K SIZE 20'-0" x 58'-6"
BLDG. B FLOORS 45(EAST) 46 (EAST & WEST) 1 1-7-69

FABRICATED BY ACLEDE STEEL COMPANY
FABRICATED AT MARYSVILLE, ILLINOIS
APPROVED FOR FABRICATION DATE 1/9/70
APPROVED FOR ERECTION DATE
DESIGN BY WIND
CHECKED BY
DATE 10-24-68
DRAWN BY V.M. CHURA IN CHARGE
DATE 10-24-68
CHECKED BY
DATE
FABRICATION CONT. NO. 221
SHEET PLATE
OFFICE ISSUE


OVERALL LENGTH = 57'-7"
DAMPING SADDLE
COLUMN END
TRUSS NO C32TIP 57'-7" LONG
TRUSS NO C3TIP 57'-7" LONG
CLOSURE UNIT (BC1)
L = 57'-7"
PANEL NO CIP SIZE 20'-0" x 57'-7"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TOP VIEW DETAIL A
SECTION C-C
DETAIL D
DETAIL E
DETAIL F
DETAIL G
DETAIL B
TOP VIEW - DETAIL B
SECTION A-A
END SUPPORT ANGLES
TYPICAL PLAN OF TOP CHORD END DIAGONAL TRUSS BRACES
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.
REQUIRED MATERIAL
FLOOR TRUSSES
DIAGONAL FLATS
PATCH PLATES
COVER PLATES
ANGLE CLIPS
CONNECTION BAR
CLOSURE UNIT
CONNECTION PLATES
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
BLDG. A FLOORS 74 (N)
BLDG. B FLOORS 74 (WEST)
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION
DRAWN BY
DESIGN
CHECKED BY
DATE
6-6-69 AS NOTED



DIMENSION HC4 ARE RELATED TO HOLES PUT IN TOP CHORD END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PC	SIZE	WT	SPEC
CHORDS & FLOOR TRUSSES	A1	TIM	6	C32TIM 58'-3"	ST 400M
	A2				
	A3				
RAILING TRUSSES					
	A4	3	4" x 2" - 10'-11"		ST 400
3"x2"x1/4" ANGLE	A5	5	3" x 2" x 1/4" x 4'-9"		ST 400
	A6	1	3" x 2" x 1/4" x 5'-0"		ST 400
	A7	2	3" x 2" x 1/4" x 5'-3"		ST 400
DIAGONAL FLAT					ST 400
PATCH PLATES	PP1	18	2" x 1'-0" x 3/8"		ST 400
	PP2	18	3" x 1'-3" x 3/8"		ST 400

OVERALL LENGTH = 59'-9"

DAMPING SADDLE

CORE END

TRUSS NO C32TIA 59'-9" LONG

CLOSURE UNIT (BC)

24T12

24TH

DUS-2

DUS-1

DUS-3

WC1

WC2

WC3

WC4

HC4

20'-0" C/C

E HOLES — 3"

E DIMENSION HC4 ARE RELATED TO HOLES PUNCHED IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE E OF THE COLUMN CLIPS & BRACES.

PANEL NO. CP1A SIZE 20'-0" x 59'-9"

SEE DETAIL B

COLUMN C/L

DAMPING SADDLE

PP1

PP2

5'-3" 4'-10" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 5'-3"

SEE DETAIL F

SEE DETAIL D

SEE DETAIL E

SEE DETAIL C

COVER PLATE PLACEMENT

LOCATION OF HOLES

6'-10½" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2½"

PATCH PLATES ARE ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP CHORD PATCH PLATE PP1

COVER PLATE

TOP VIEW - DETAIL A

DETAIL A

SECTION C-D

DETAIL D

DETAIL E

DETAIL B WHEN APPLICABLE

TOP VIEW - DETAIL B

DETAIL C

SECTION E-F

NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" x 2" FULL THROAT FILLET.

DETAIL F

DETAILS

SECTION A-A

DETAIL

EXT COL REF CINE

TYP. EACH FLAT

TYPICAL PLAN OF CHORD END DIAGONAL FLAT SHARED BY ADJACENT OVER DECK SECTIONS

STUDS WTC 230

WTC 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, IE. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	SHP. DRWG.
FLOOR TRUSS	T1	6	32T1A - 59'-9"	
CHORD ANGLE	T12	3	6" x 6" x 19'-11"	BT212
	A1	5	3½" x 2½" x ¼" x 19'-11"	ST 403
	A2	4	3½" x 2½" x ¼" x 5'-11½"	ST 403
	A3	2	3½" x 2½" x ¼" x 5'-11¼"	ST 403
	F1	5	2" x 2" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	½" x 4'-6" x 5'-9"	ST 400
	PP2	18	½" x 4'-6" x 3'-3"	ST 400
COVER PLATES	A	3	9" x .135" x 3'-11½"	ST303
	B	6	5" x .0135" x 3'-2½"	ST 303
	C	3	9" x .0135" x 3'-2½"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1½" x ¼" x 10'-5"	ST 400
¾" Ø SHEAR ANCHOR	SA2	12	¾ Ø REBAR x 0'-6"	ST 400
DAMPING SADDLE	DUS-2	2	3½" x 3½" x ⅜" x 3'-6⅞"	ST298
	DUS-3	1	3½" x 3½" x ⅜" x 3'-6⅞"	ST298
CONNECTION BAR	CB1	4	1" x 2" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - 4" x 1½" x ¼" x 230 x 6'-6½"	BT212 CD204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
2	5-6-69	AS NOTED	G.D.C
1	7-17-68	GENERAL	T.M.C

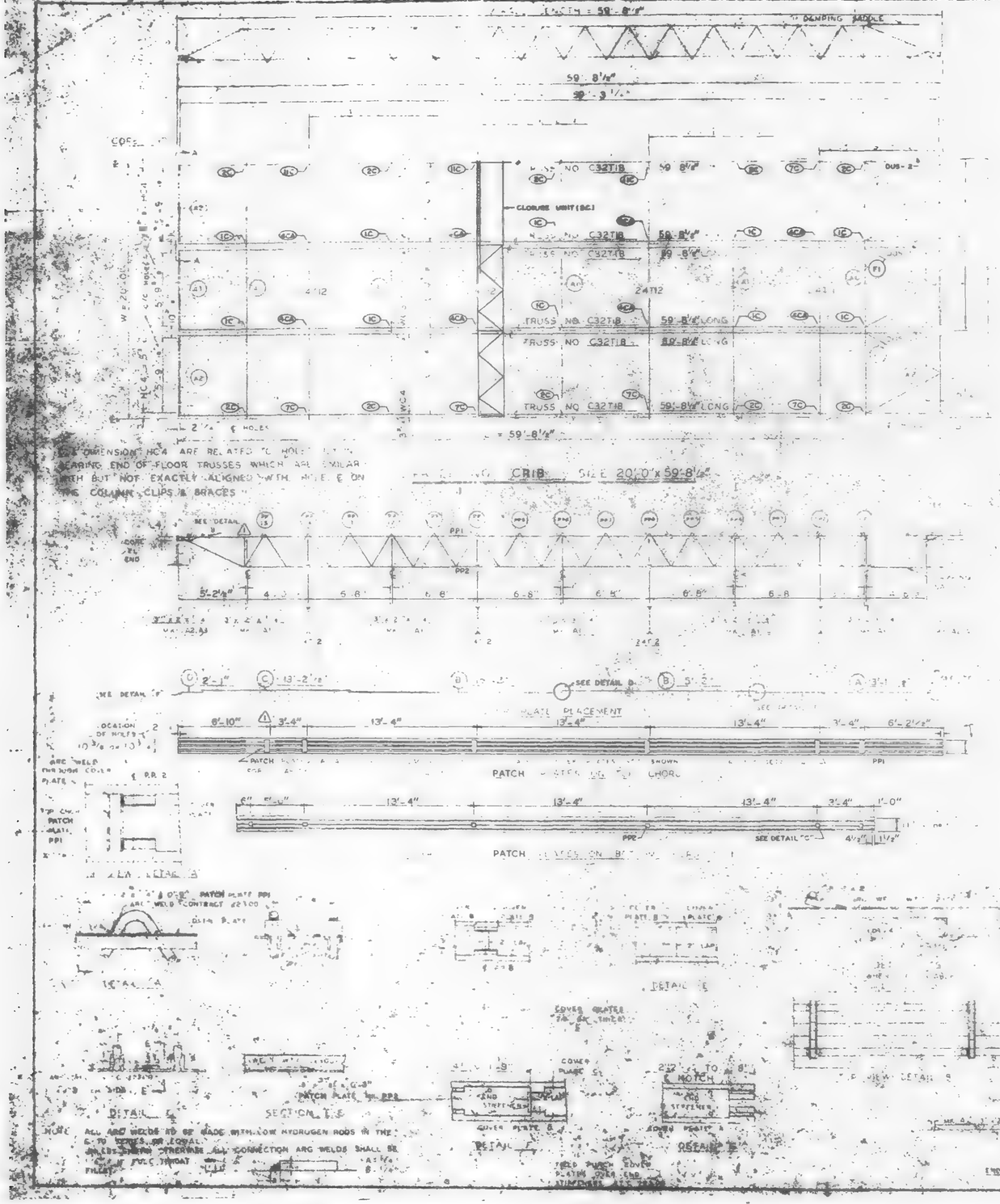
REF D-WC

AB4-1	10-15-68
AB4-4	7-22-68
AB4-41	7-22-68
AB4-42	1-6-69
AB3-2	1-3-68
AB-2	7-22-68
AB4-5 & 7	7-22-68
AB4-42	10-15-68

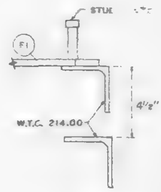
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-24, 26-38 (NORTH & SOUTH), 49-58, 60-66, 68
69 (NORTH) PANEL CRIA - 20'-0" x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-C

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. AB3-B 4-1-68 PLATE
APPROVED FOR FABRICATION BY James Witte DATE 1/2/70
DRAWN BY DATE
DATE APRIL 10, 1968
APPROVED FOR FABRICATION BY DATE
CHECKED BY J.R.PAUL DATE APRIL 10, 1968
IN CHARGE OF ENGG DEV.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO. FP CRIA



DIMENSION HC4 ARE RELATED TO HOLE LOCATIONS BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE LOCATIONS ON THE COLUMN CLIPS & BRACES.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DWG.
MATERIAL	MK.	PCS.	SIZE	
	B	18	50'-8 1/2"	CD201-B
				8"/12
	A1	5	9'-11"	ST 403
	A2	4	4 @ 5'-6"	ST 403
		4		ST 403
				ST 402
PATCH PLATES	PP1	18		ST 400
	PP2	18	3"	ST 400
		3		
		6	x 5'-2"	ST 303
		3	x 2'-2"	ST 303
		3	2'-11"	ST 303
ANGLES		21	4"x4"x0'-6"	ST 400
	SA2	12	2 @ 2'-9"	ST 400
			2 x 3/8"x3'-6 7/8"	ST 298
			x 3/8 x 8 7/8"	ST 298
CONNECTION BAR	CB1	4	1'-3"	ST 400
CLOSURE UNIT	BC	3	2'-2" x 1'-1/4" x 23" x 1'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3/8" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

ANGLES	10-15-68
PL 5/16	7-22-68
ANGLES	7-22-68
A	1-6-69
T-AB3-1	1-6-69
T-AB1-2	7-22-68
T-AB2-6 & 7	7-22-68
T-AB4-6	10-15-68

83-91 & 93-106 (N)

CRIB X 59'-8 1/2"

BLDG. B FLOORS 83-91 & 93-106 (WEST)

FABRICATED BY ALLEGHENY STEEL COMPANY

AT WADISON ILLINOIS

APPROVED FOR FABRICATION BY James White DATE 1/24/70

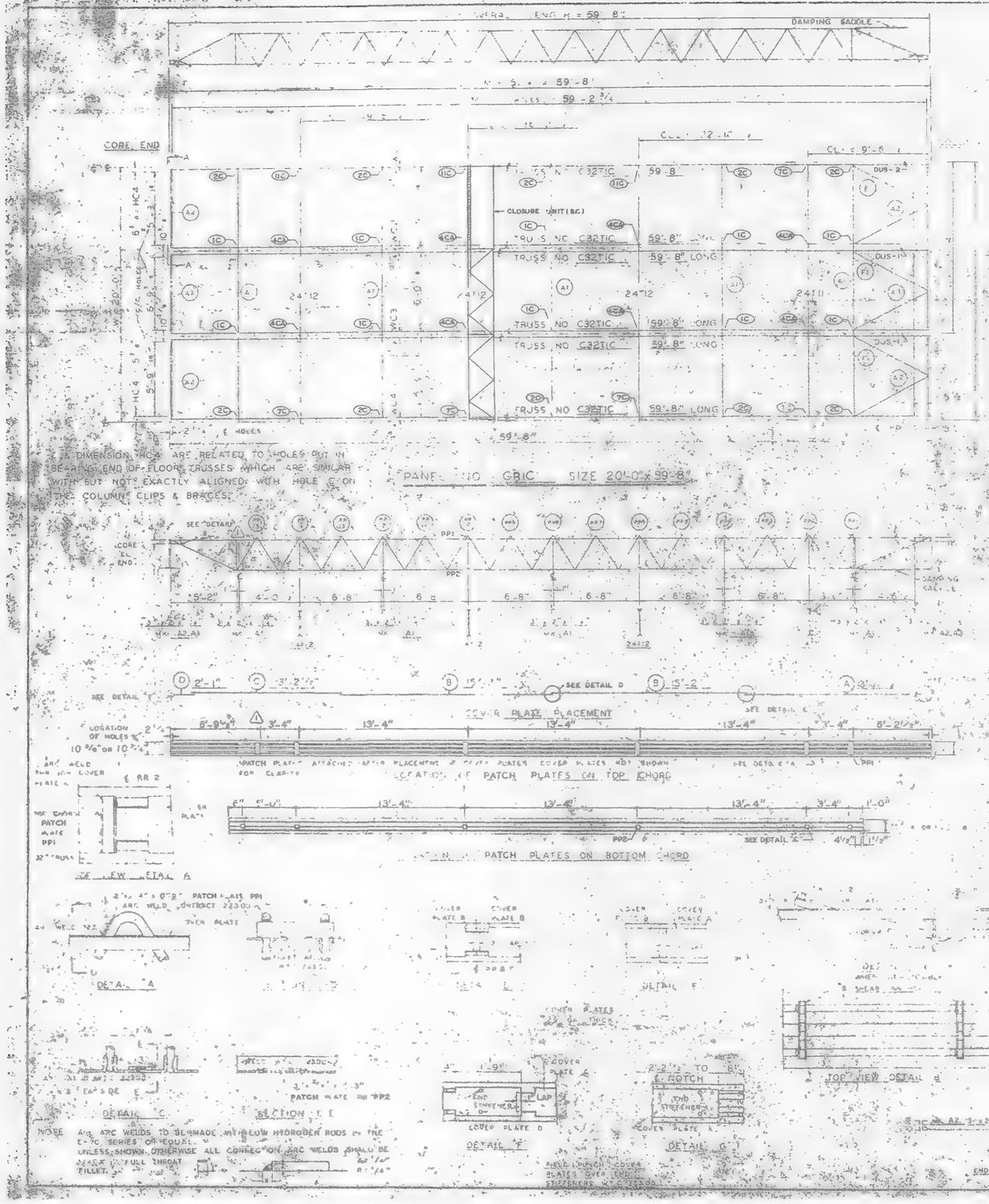
ASSEMBLED FOR FABRICATION BY DATE

DETAILED DESIGN DRAWING NO. 2 AB3-B PLATE

DRAWN BY DATE OCT 23, 1968

CHECKED BY T.N.CHURCHILL CHIEF DRAFTSMAN DATE OCT 23, 1968 PROJECT ENGINEER

FABRICATION CONT. NO. W.J.T. 221 SHEET CD 203



REQUIRED MATERIAL PER PANEL				
MATERIAL	MARK	NO.	SIZE	REF. DWG.
FLOOR TRUSSES	C	1	C32TIC - 59'-8"	ST 400
	L	1		
WEDGING		3	24"12 - 10'-11"	BT 212
3" x 3" x 1/4" ANGLE	A1	9	3 x 2 3/4 x 9'-11"	ST 403
	A2	4	3 x 2 3/4 x 5'-11 9/16"	ST 403
		2	3 x 2 3/4 x 5'-11 9/16"	ST 403
DIAGONAL	F1	8	8 x 4 1/4 x 6 8	ST 402
PATCH PLATES	PP1	18	5"	ST 400
	PP2	18	3"	ST 400
COVER PLATES	B	3	9 x 0.135 x 11 1/2	ST 303
	B	6	9 x .135 x 5 1/2	ST 303
	C	3	8 x 0.135 x 3 1/2	ST 303
	D	3	0" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
7/8" SHEAR ANCHOR	SA2	12	7/8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS	2	3/8" x 3/8" x 3/8" x 3'-6 7/16"	ST 298
	DUS	2	3/8" x 3/8" x 3/8" x 3'-6 7/16"	ST 298
CONNECTION BAR	CBI	4	1 1/2" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 @ 1 1/2" x 1 1/4" x 230 x 6'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4'-3" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

REF DWGS
1 AB4-3 10-15-68
1 AB4-15,16 & 39 7-22-68
1 AB4-41 7-22-68
AB4-24 1-8-69
1 AB1-2 1-8-68
1 AB1-2 7-22-68
AB4-5 & 7 7-22-68
AB4-42 10-15-68

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 49-58, 60-66, 68-74, 79-91 & 93-106 (S)

PANEL GRIC SIZE 20'-0" x 59'-8"

BLDG B FLOORS 49-58, 60-74, 79-91 & 93-106 (EAST)

FABRICATION BY VALLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A93-B PLATE

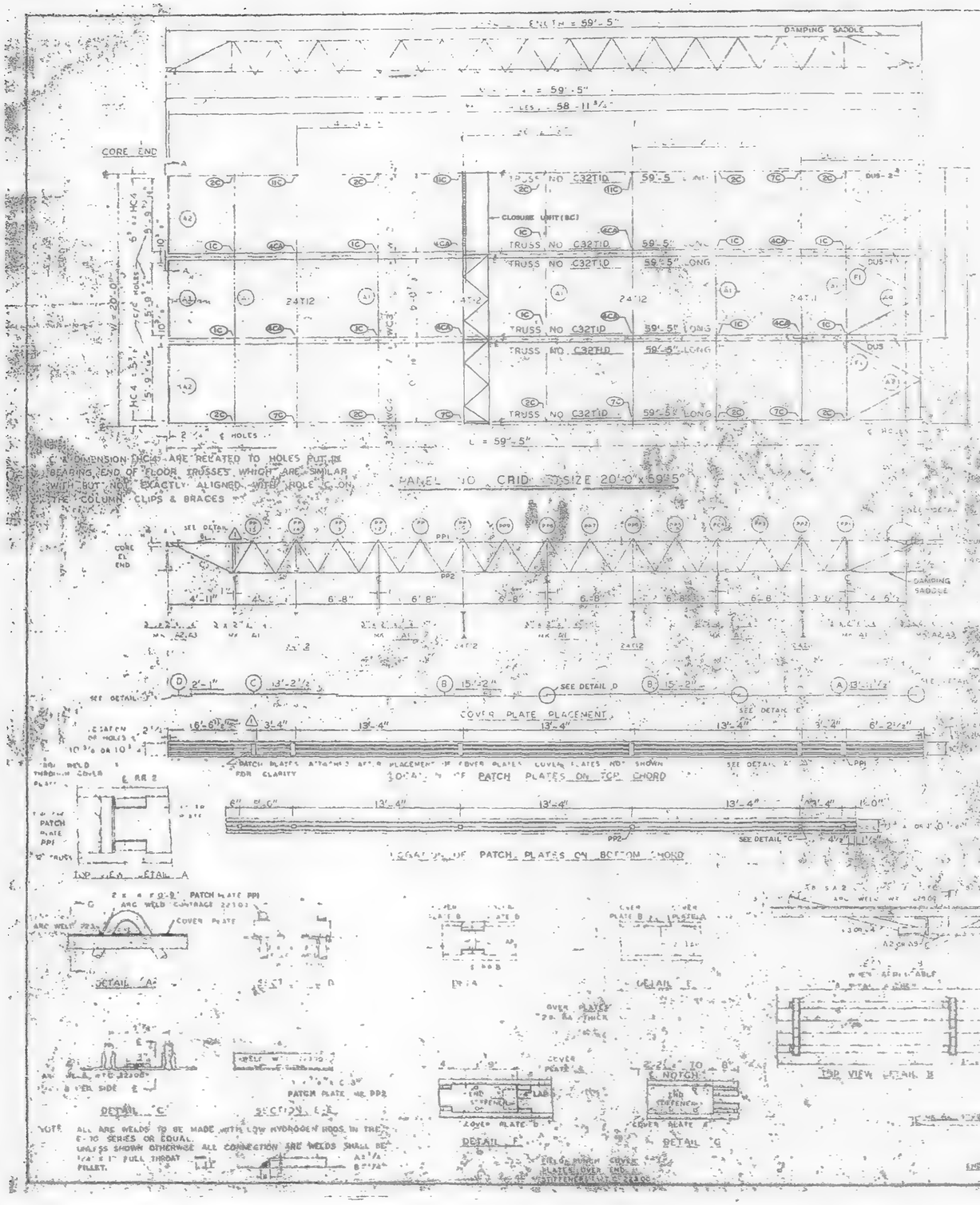
RECEIVED FOR FABRICATION BY James Wolfe DATE 1/2/70

APPROVED FOR FABRICATION BY DATE

DRAWN BY [illegible] DATE OCT. 23, 1968

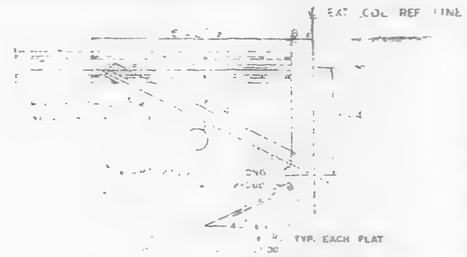
CHECKED BY T.M.C.H. RAIN CHARGE DATE OCT. 23, 1968

FABRICATION CONTRACT NO. W.C.



NOTE: ALL ARE WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION SHEAR WELDS SHALL BE 1/4" E 70 FULL THROAT FILLET.

6" DIMENSION LINES ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE LOCATION IN THE COLUMN CLIPS & BRACES



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

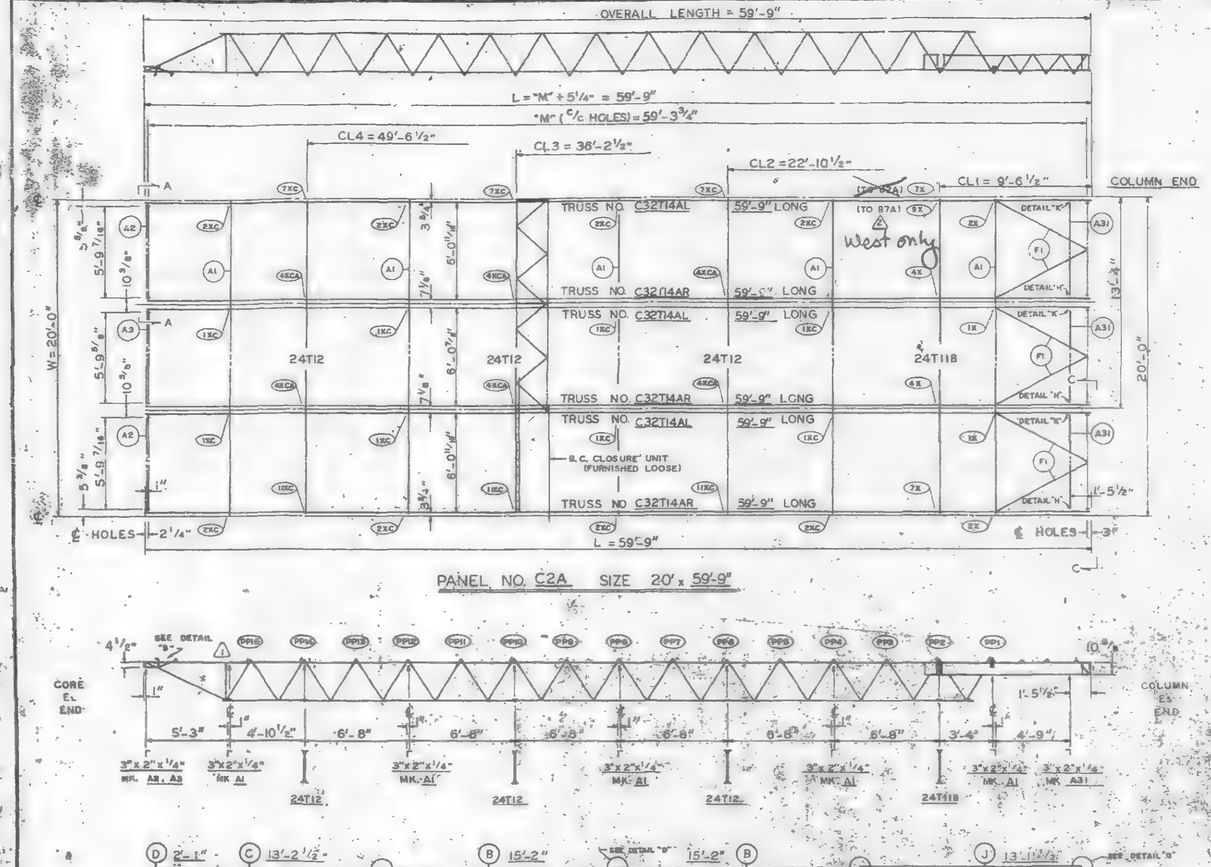
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	D1	1	32T1D - 59'-5"	ST201D
	T1	1	24T11 - 19'-11"	ST211
	T12	3	24T12 - 19'-11"	ST212
STRUCTURAL ANGLE	A	3	3 x 2 x 1/4 x 19'-11"	ST 403
	A2	4	3 x 2" x 1/4 x 5'-11 1/8"	ST 403
	A3	2	3"x2" x 1/4" x 5'-11 1/4"	ST 403
DIAPHRAGM	5	4	2 x 9" x 0'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	2" x 1/4" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135 x 43'-11 1/2"	ST303
	B	6	6" x .0135 x 19'-2"	ST303
	C	3	9" x .0135" x 13'-2 1/2"	ST303
	D	3	6" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 2 1/2" x 1/4" x 0'-6"	ST 400
7/8" Ø SHEAR ANCHOR	SA2	8	7/8" Ø REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-2	2	13 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-1	1	13 1/2" x 3 1/2" x 3/8" x 3'-8 7/8"	ST 298
CONNECTION BAR	CBR	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1/4" x 230 x 6'-6 1/2"	ST 212 / CD 202
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	6 1/2" x 3/8" x 0'-9"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-0"	ST 400

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

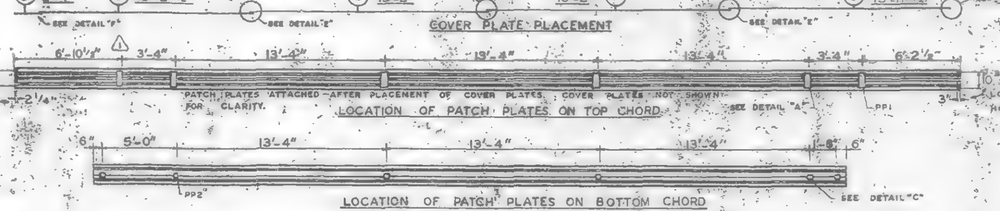
AB4	10-15-68
AB4 5,16,&19	7-22-68
AB4 41	7-22-68
AB12A	1-6-69
AB3	3-3-69
AB1	7-22-68
AB2 & A	7-22-68
AB4 4	10-15-68

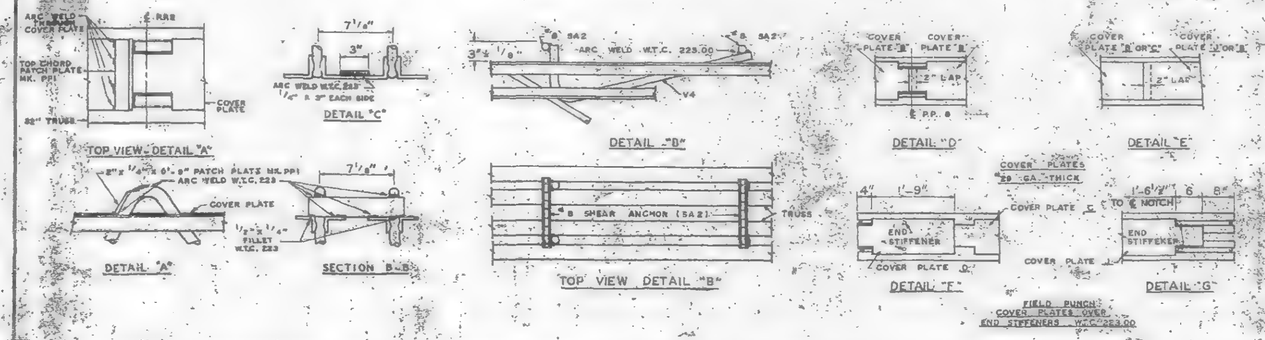
BLDG. B FLOORS 81-82 (WEST)

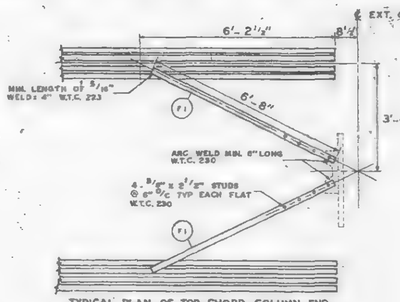
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. AB3 B
APPROVED FOR APPLICATION BY James White DATE 10/10/68
DRAWN BY DATE OCT 23, 1968
APPROVED FOR FABRICATION DATE
CHECKED BY DATE OCT 23, 1968
FABRICATION CONT. NO. 291
DETAILED AT L.S.C. MADISON
SHEET NO. CD 201

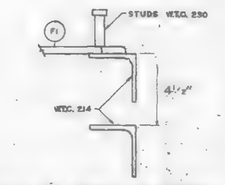


PANEL NO. C2A SIZE 20' x 59'-9"



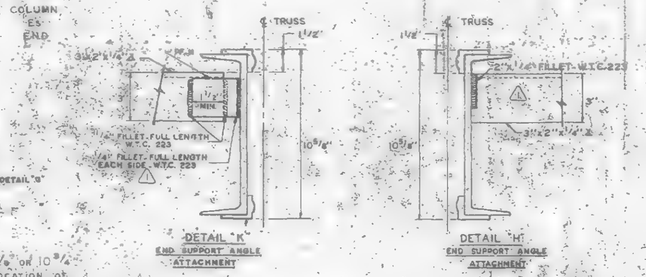


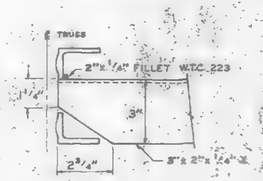


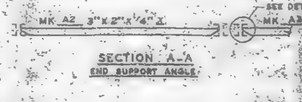


REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1 1/2" □ 6'-8 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 3/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 3'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3"x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/16" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x .25"x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-5"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P9	6	3"x 1/2" x 5'-1"-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (12)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 223.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.







NO.	DATE	REVISION	BY
2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

SKILLING HELLE CHRISTIANSEN ROBERTSON
Structural & Civil Engineers
CONFORMS
APPROVED AS NOTED
RESUBMIT
REJECTED
6/6/69 by SK

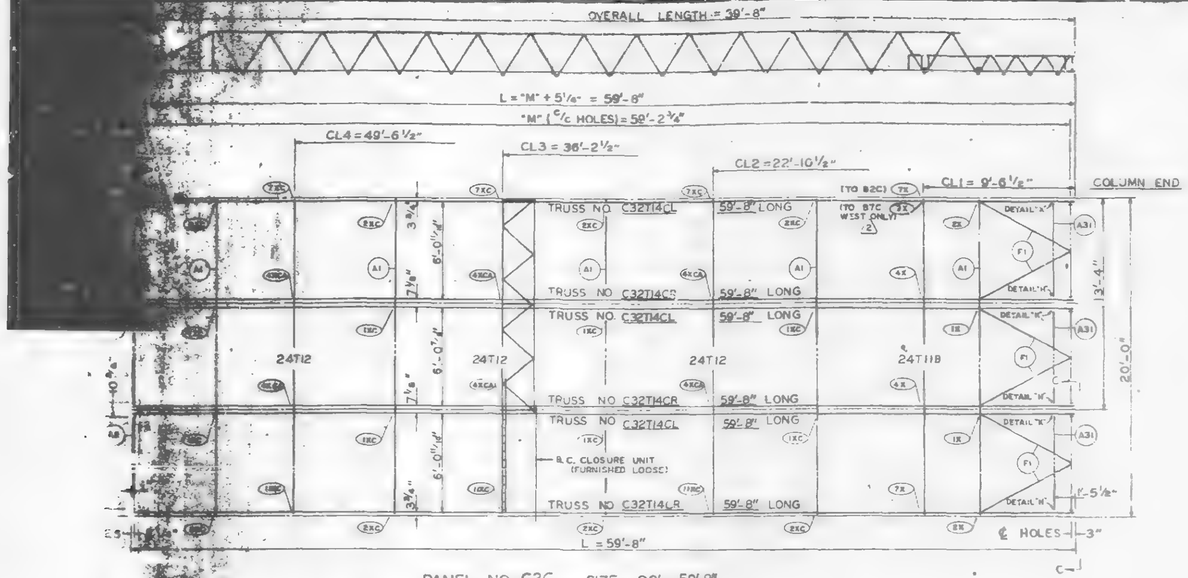
REF DRWG.

7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

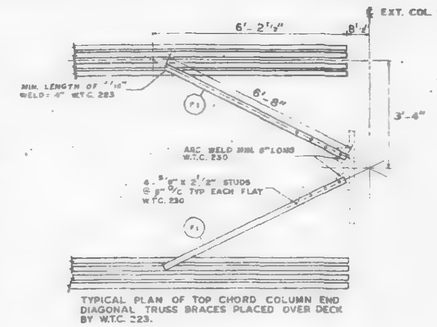
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) 1
PANEL L.G.A. - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	7-AB3-28
APPROVED FOR FABRICATION BY	DATE FOR P.O.N.Y.A.	PLATE	
		DRAWN BY	D.R.
		DATE	DEC. 5, 1968
APPROVED FOR FABRICATION BY	DATE FOR FABRICATOR	CHECKED BY	T.M. CHUKA
		DATE	DEC. 5, 1968
DETAILED		IN CHARGE OF PROD. DEV.	
		FABRICATION CONT. NO.	W.T.C. 221
		SHEET NO.	FP C2A



PANEL NO. C2C SIZE 20' x 59'-8"

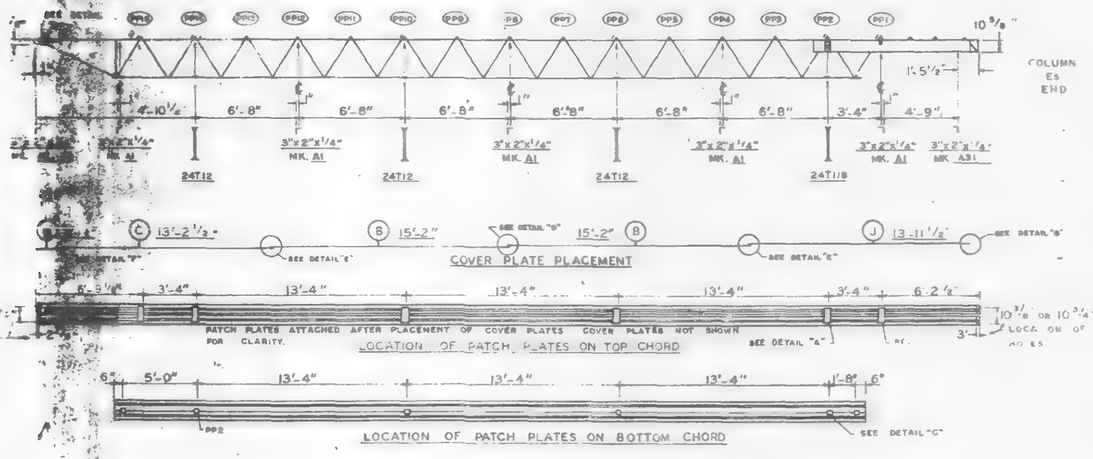


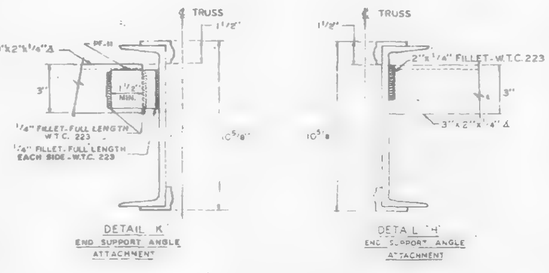
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4"℄ ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	11 7/16" O 6'-6 1/16" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 9'-11 9/16"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/16"	ST 416
CLOSURE PLATES	PP-11	3	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 3 1/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/16"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/16"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
7/8 SHEAR ANCHOR	SA2	6	" 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.



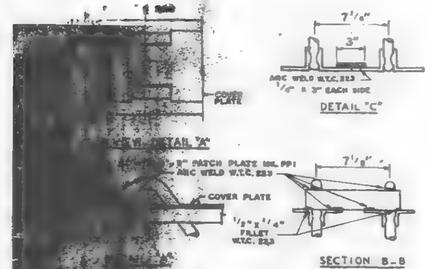


SECTION C-C
END SUPPORT ANGLE

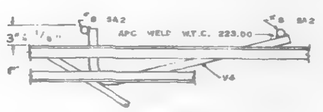
NO.	DATE	REVISION	BY
2	6-13-69	AS NOTED	G.D.C.
1	5-12-69	AS NO ED	G.D.C.

REF DRWG.

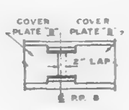
7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68



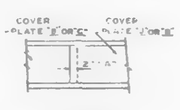
DETAIL "C"



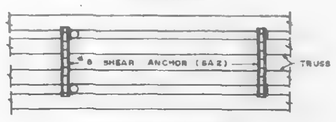
DETAIL "B"



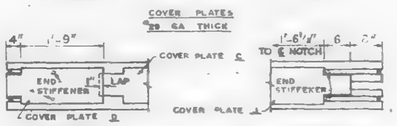
DETAIL "D"



DETAIL "E"



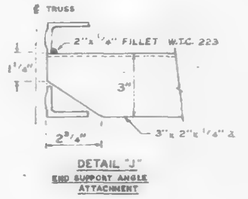
TOP VIEW DETAIL "B"



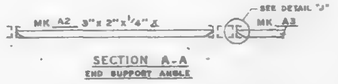
DETAIL "F"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "G"



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

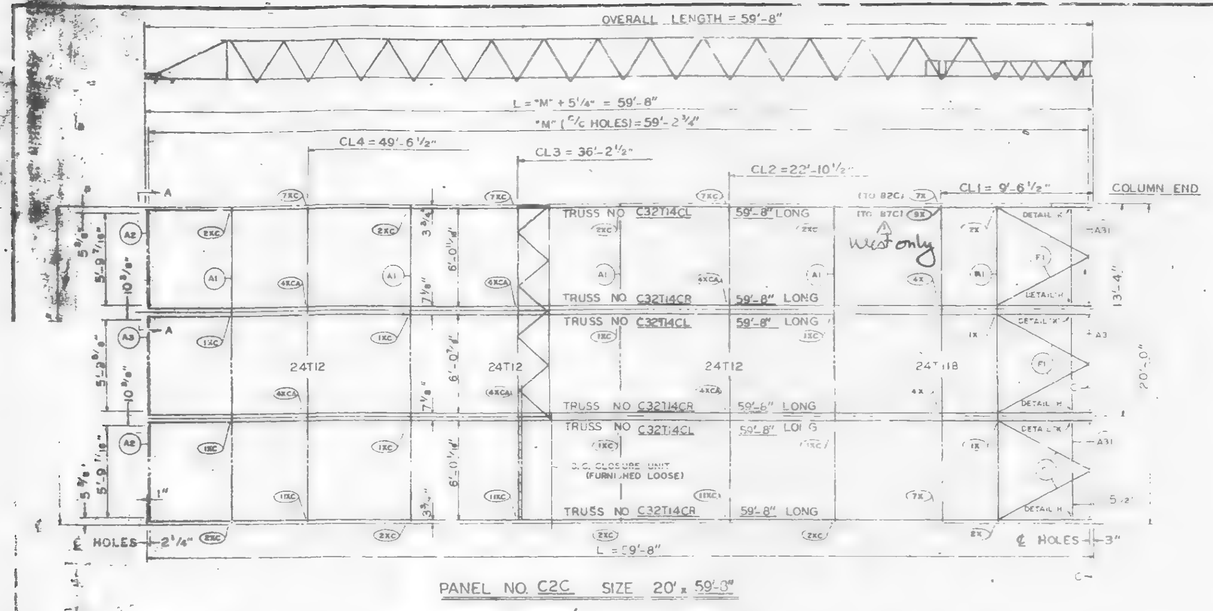
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

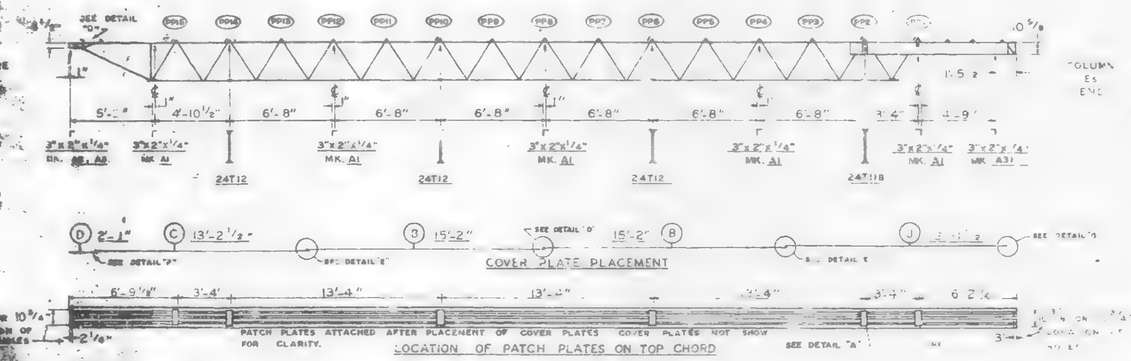
PANEL C2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A.	DATE 7/24/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY I.M. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP C2C



PANEL NO. C2C SIZE 20' x 59'-8"

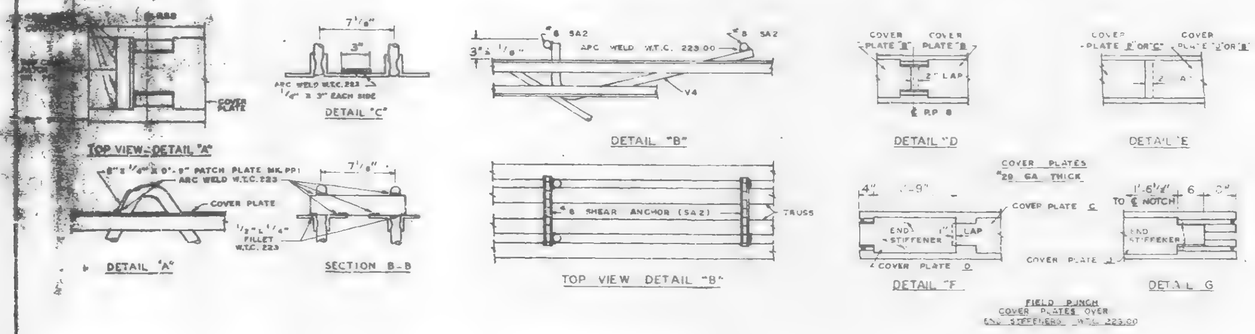


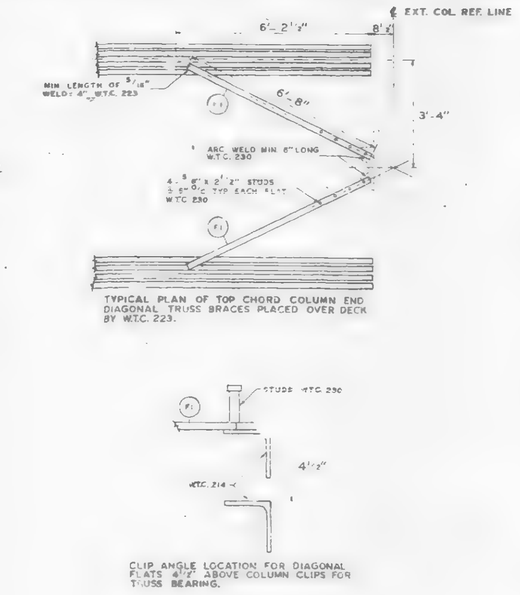
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

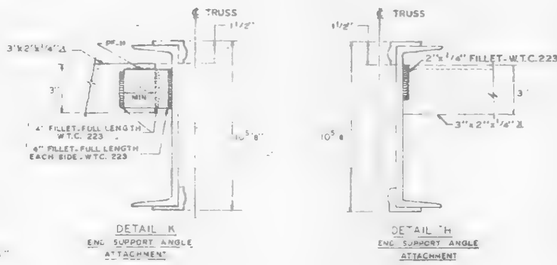
LOCATION OF PATCH PLATES ON BOTTOM CHORD



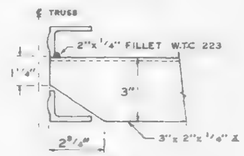


REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1'-1/4" D 6'-8 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 6'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3"x 1/4" x 0'-2 3/4"	ST 212
DIAGONAL FLATS	F	6	1'-2 x 5'-8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	"x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 3'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x 35" x 13'-2 1/8"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	21	2"x 2"x .25"x 0'-6"	ST 400
SHEAR ANCHOR	SA2	6	" Ø REBAR x 0'-6"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3" x 0'-6 1/2"	ST 400
	P2	4	4" x 39"x 0'-9"	ST 400
	P3	1	4"x 4"x .39"x 1'-0"	ST 400
	P9	6	"x 1 1/2"x 1'-2"	ST 409

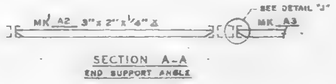
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO	DATE	REVISION	BY
1	5 2 69	AS NOTED	SDC

SKILLING-HELLE CHRISTIANSEN-ROBERTSON
Structural & Civil Engineers
AS NOTED
APPROVED
6/6/69 SC

REF DRWG.

7-AB3-28	10-4-66
7-AB4-28	7-22-68
7-AB1-13	10-6-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

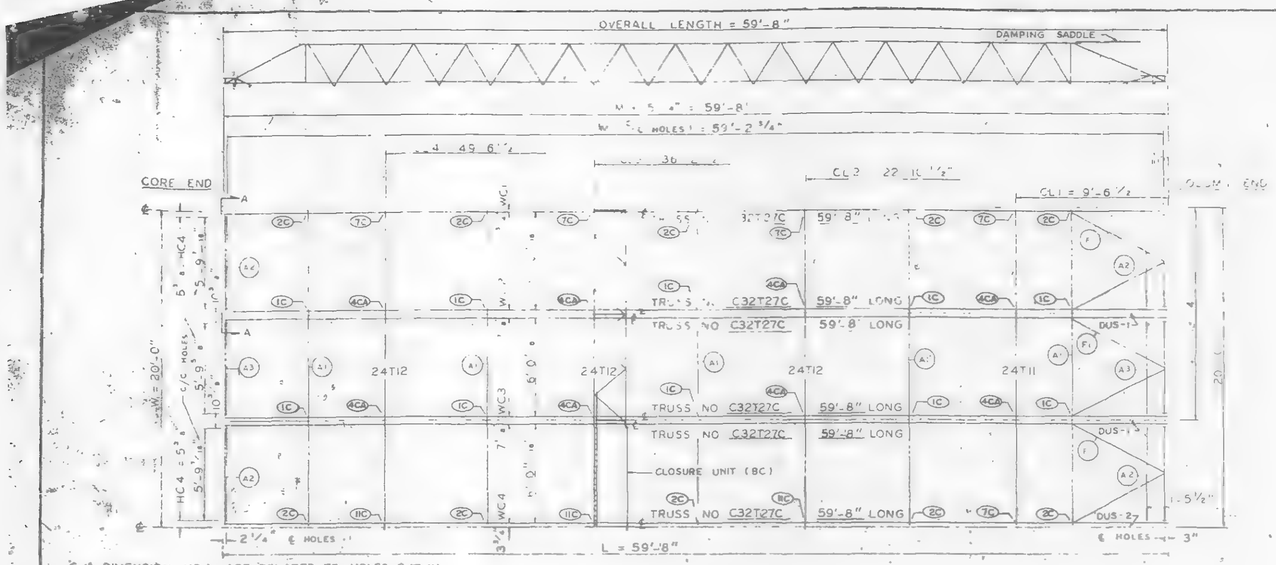
BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL C2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

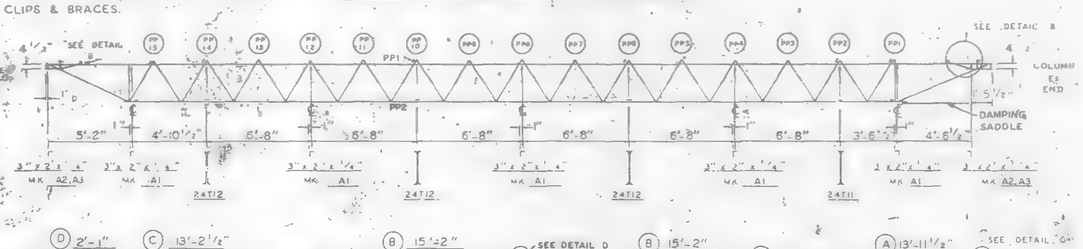
FABRICATION BY LACLEDE STEEL COMPANY

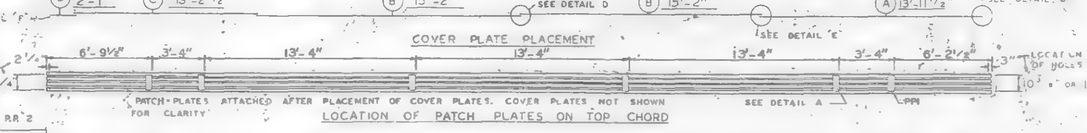
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-28	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY T.M. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO FD C2C

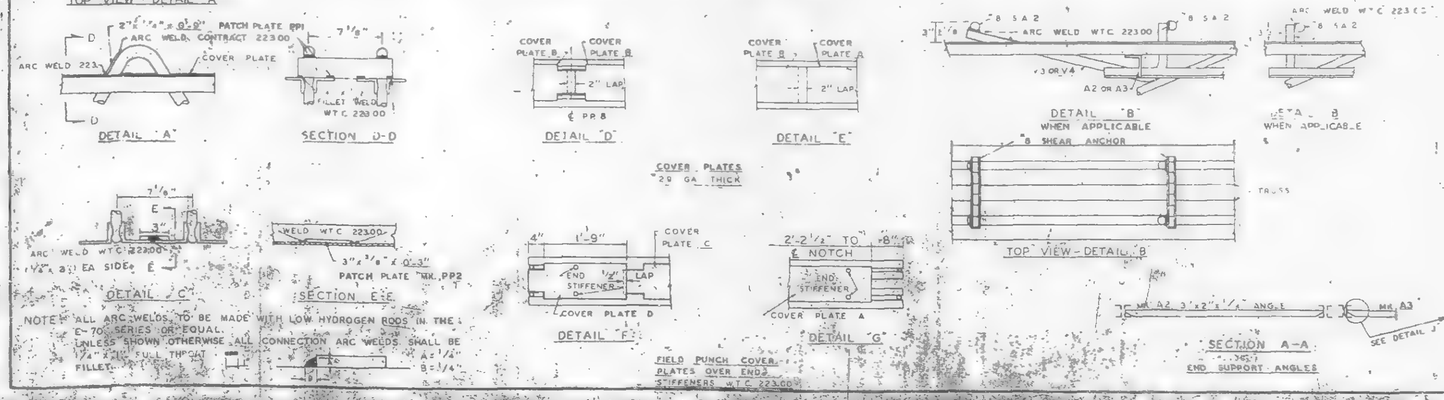


E & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

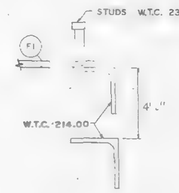
PANEL NO C3C SIZE 20'-0" x 59'-8"







NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4" x 2" FULL THROAT FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
CLOSURE UNIT	27C	6	32T27C 59'-8"	ST227C
	T1	1	24" x 9'-1"	BT2.2
	T2	3	24" x 9'-1"	BT2.2
ANGLE	A1	5	3"x2"x 1/4" x 19'-11"	ST 403
	A2	4	3"x2"x1/4"x5'-11 1/8"	ST 403
	A3	4	3"x2"x1/4"x5'-11 1/4"	ST 403
	B	5	4" x 4" x 5/8	ST 402
PATCH PLATE	PP1	18	2" x 4" x 0'-9"	ST 400
	PP2	18	3" x 4" x 1'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x59'-8"	ST303
	B	6	9"x.0135"x15'-2"	ST303
	C	3	9"x.0135"x13'-2 1/2"	ST303
	D	3	9"x.0135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	13 9/16"x3 1/2"x 3/16"x3'-6 7/8"	ST298
	DUS-2	1	3 1/2"x3 1/2"x 3/16"x3'-6 7/8"	ST298
CONNECTION BAR	CB1	4	1 1/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	24"x1 1/2"x 1 1/4"x 230" x 6'-6 1/2"	BT2.2 CD204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

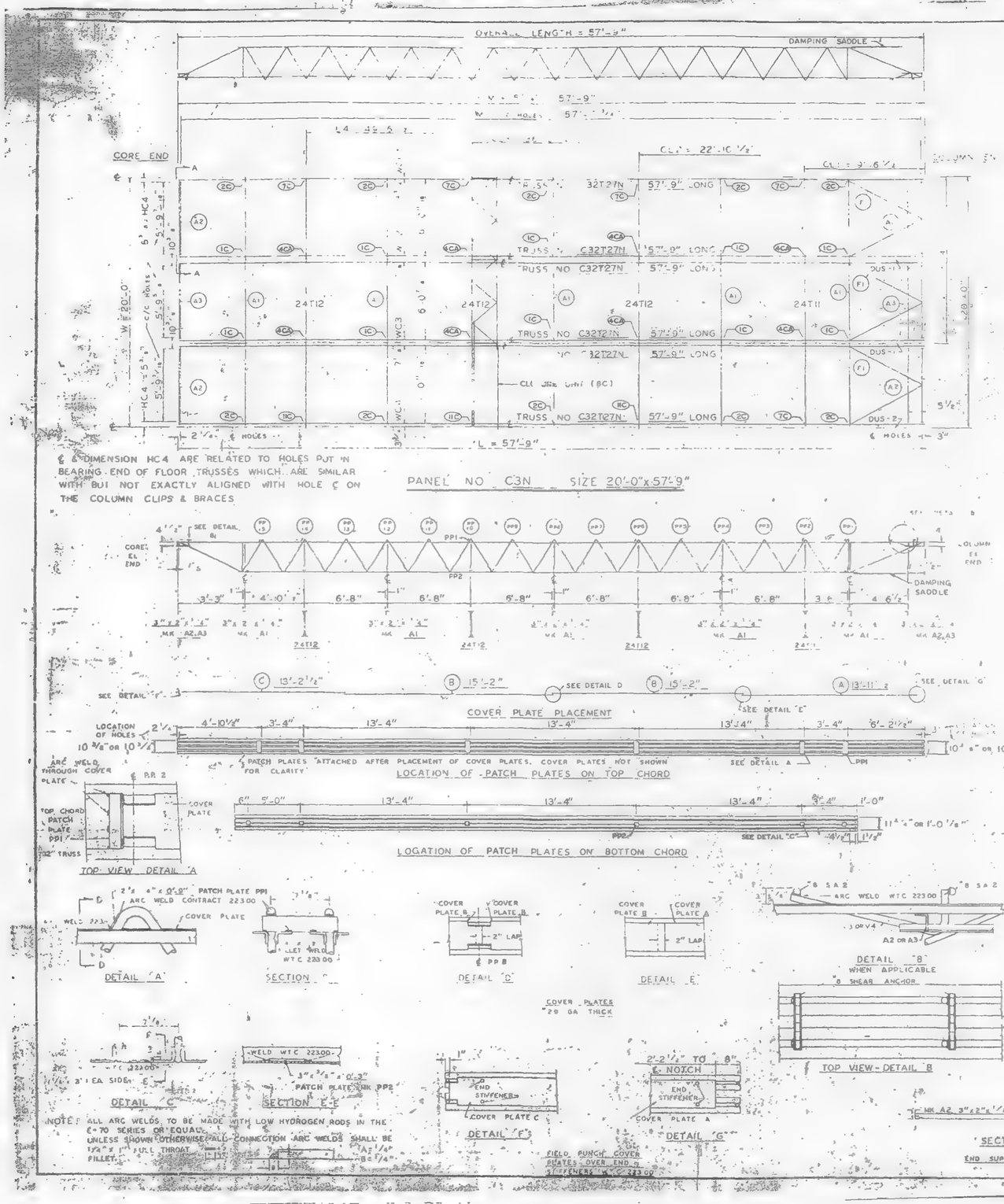
REF DRWG	
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-12-4	1-6-69
7-AB5-45	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
A.H.&.O. TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 78 (SOUTH)
PANEL C3C - 20'-0" x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 7/31/69
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE
DETAILED BY J.A.C. WEBER

DESIGN DRAWING NO 7-AB3-45 PLATE
DRAWN BY [illegible] DATE APRIL 28, 1969
CHECKED BY T.M.CHURA DATE APRIL 28, 1969
IN CHARGE OF 2000 DEV.
FABRICATION CONT. NO. W.T.C. 221
SHEET NO FP C3C



℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO C3N SIZE 20'-0" x 57'-9"

COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

TOP VIEW DETAIL 'A'

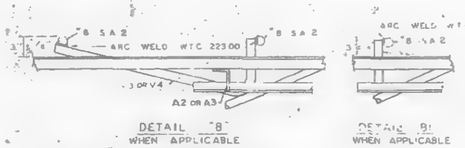
LOCATION OF PATCH PLATES ON BOTTOM CHORD

DETAIL 'A'

SECTION C-C

DETAIL 'D'

DETAIL 'E'



DETAIL "B" WHEN APPLICABLE

DETAIL 'B1' WHEN APPLICABLE

TOP VIEW - DETAIL 'B'

COVER PLATES 20 GA THICK

DETAIL 'C'

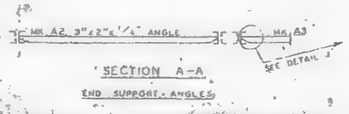
SECTION E-E

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

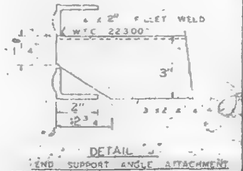
DETAIL 'F'

DETAIL 'G'

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 22300

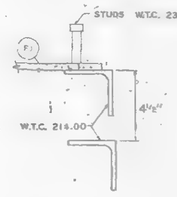


SECTION A-A
END SUPPORT ANGLES



DETAIL 'J'
END SUPPORT ANGLE ATTACHMENT

END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 22300



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
	T27N	4	T27N 57'-9	ST 227N
				C32N
	T	1	24T12	BT 212
	A	3	3 x 2 x 4 x 19'-11"	ST 403
	A2	2	2 x 4 x 5 1/16	ST 403
	A3	2	3 x 2 x 4 x 5 1/16	ST 403
	F	2	2 x 6 x 0'-8	ST 402
	PP1	18	5 x 6 x 2	ST 400
PATCH PLATES	PP2	18	5 x 6 x 3"	ST 400
COVER PLATES	A	3	9"x 0.135"x 13'-11 1/2	ST 303
	B	6	9"x 0.135"x 15'- 2"	ST 303
	C	3	9" x 0.135" x 13'-2 1/2	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x 0'-6"	ST 400
8 SHEAR ANCHOR	SA2	9	8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2"x3 1/2"x 3/8"x 3'-6 7/8"	ST 298
	DUS 2	1	3 1/2 x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1 5/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 x 1 1/2"x 1 1/4" x 230 x 6'-8 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG		
7 AB4 3	10-15-68
7-AB4-5 & 16	7-22-68
7 AB4-41	7-22-68
SA 124	1-6-69
7-AB3-45	1-6-69
7 AB1-24	1-6-69
7-AB4-6 & 7	7-22-68
7-AB4-42	10-15-68

SHOP PANEL DETAILS

FOR

WORLD TRADE CENTER - N Y C

FOR

THE PORT OF NEW YORK AUTHORITY

BAY 8 TO 44 (EAST)

PANEL C3N - 20'-0" x 57'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-AB3-45 PLATE

APPROVED FOR FABRICATION BY(1) FOR PONYA — DATE 7/24/69

DRAWN BY G.A.B. DATE APRIL 28, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

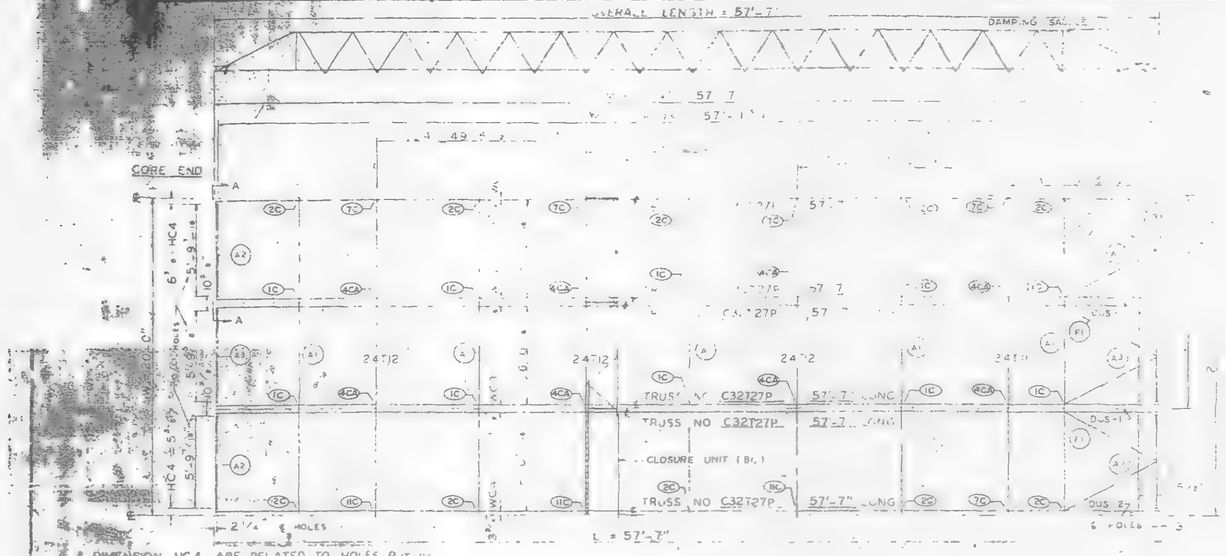
CHECKED BY T.M.CHURA DATE APRIL 28, 1969 IN CHARGE OF PROD DEV

DETAILED BY J. WEBER

FABRICATION CONT. NO. WTC 221

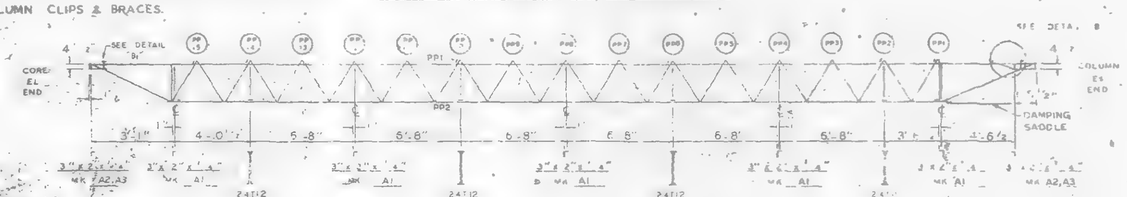
SHEET NO FP C3N

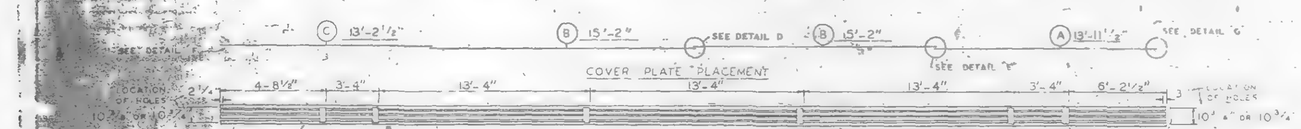
LACLEDE STEEL CO.

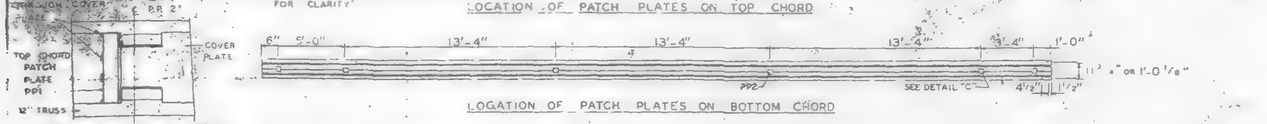


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

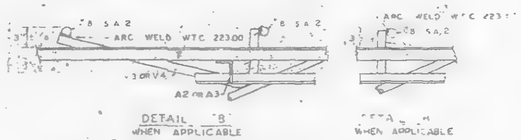
PANEL NO C3P SIZE 20'-0" x 57'-7"

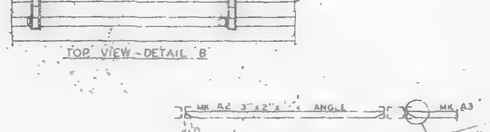


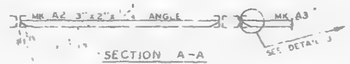


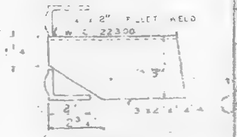


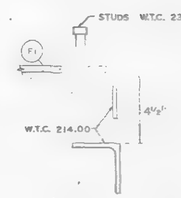
TOP VIEW DETAIL 'A'











CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MK	MATERIAL PER PANEL			REF DRWG
				ST227P
				BT212
				BT212
				ST 403
				ST 403
				ST 403
				ST 402
				ST 400
				ST 400
				ST 400
				ST 400
	CB	4	1 - 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4x1 2"x 1¼"x .230 x 6'-6½"	BT212
				CD204
CONNECTION PLATES	P1	5	3½" x 3'-6" x 0'-6½"	ST 400
	P2	4	4½" x .39" x 0'-9"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY

REF DRWG		
	AB4-3	10-15-68
	AB4-15 & 16	7-22-68
	AB4-41	7-22-68
	SA 124	1-6-69
	AB3-45	1-6-69
	AB1-24	1-6-69
	AB2-6 & 7	7-22-68
	AB4-42	10-15-68

N Y C
T A
N E W YORK AUTHORITY

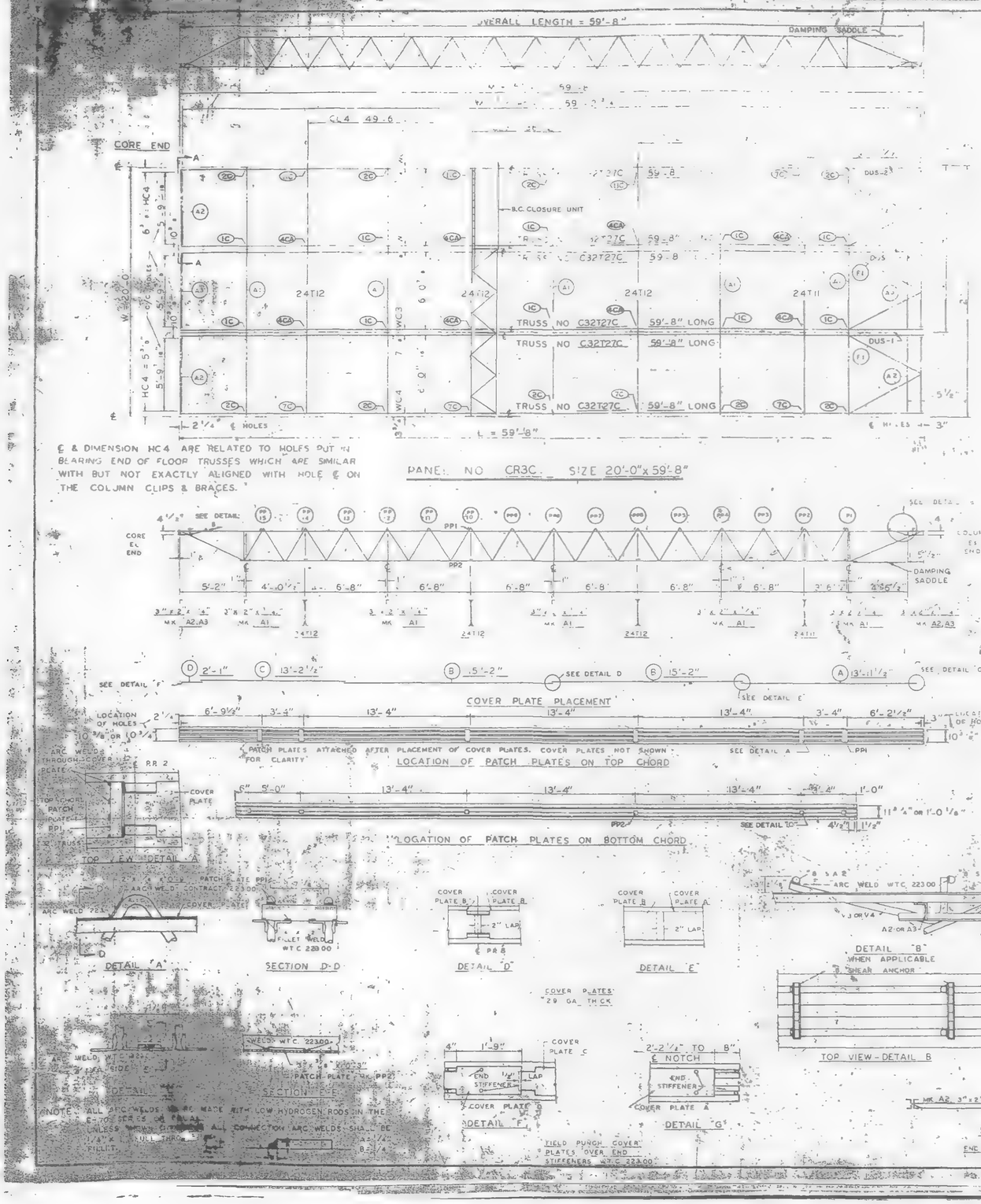
78 (NORTH)

PANEL C3P - 20'-0" x 57'-7"

BLDG. B FLOORS 78 (WEST)

FABRICATION BY ACME STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-45 PLATE
APPROVED FOR FABRICATION BY FOR POWER	DATE 7/31/69	DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969
DETAILED BY A.F. WEBER		FABRICATION CONT. NO. 221
		IN CHARGE OF PROD DIV
		SHEET NO FP C3P



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
	C27C	6	32"x27C- 59'-8"	ST 27C
			24"	BT 21
			24"	BT 212
	A3	5	3 x 3 x 4 x 4	ST 403
	A2	4	3 x 3 x 4 x 4	ST 403
	A1	5	3 x 3 x 4 x 4	ST 403
	F1		4" x 8	ST 402
	PP1	1B	1'-0 9	ST 400
PATCH PLATES	PP2	1B	1'-0 3"	ST 400
COVER PLATES	A	3		ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
⅞" SHEAR ANCHOR	SA2	12	⅞" REBAR x 0'-9"	ST 400
DIAPHRAGM PLATE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1 1/4" x .230 x 8'-6 1/2"	BT 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

REF DRWG		
	AB4-3	10-15-68
	AB4-15 & 16	7-22-68
	AB4-41	7-22-68
	SA-12-4	1-6-69
	7-AB3-46	1-6-69
	AB1-24	1-6-69
	7-AB2-6 & 7	7-22-68
	7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

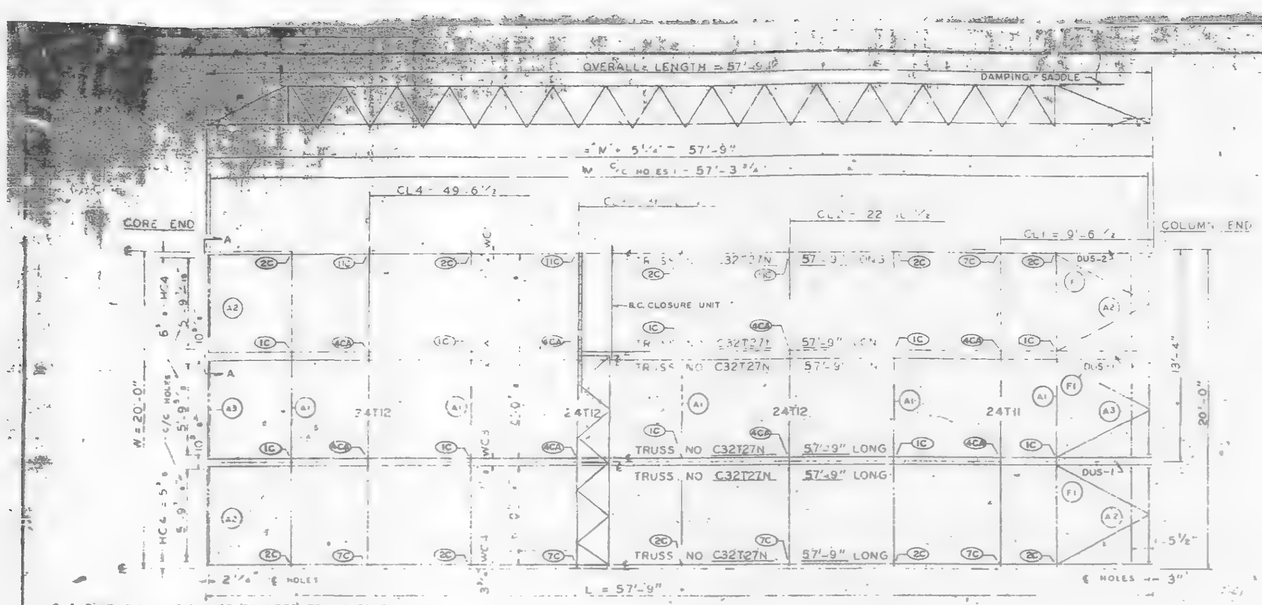
BLDG. A FLOORS 78 (SOUTH)

PANEL CR3C - 20'-0" x 59'-8"

BLDG. B FLOORS 78 (EAST)

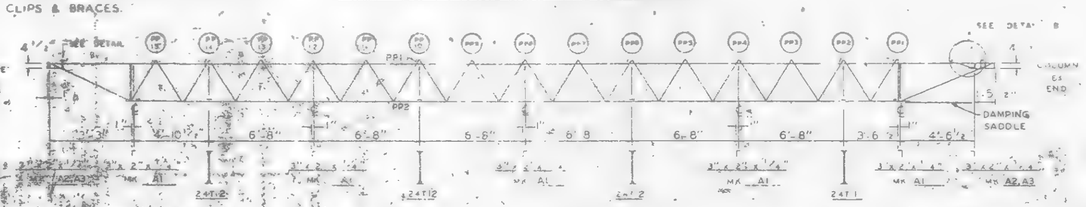
FABRICATION BY LACLEDE STEEL COMPANY

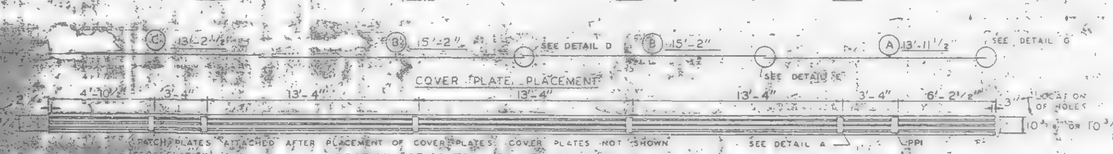
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-46	PLATE NO.
APPROVED FOR FABRICATION BY FOR PONYA	DATE 7/31/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible] TRACED		FABRICATION CONT. NO. WTC 221	SHEET NO. FP-CR3C

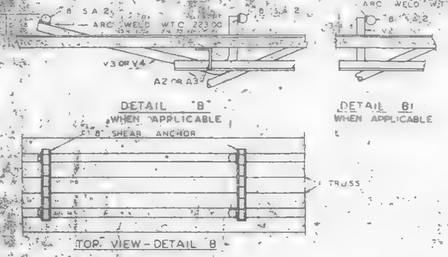


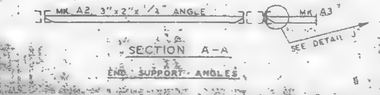
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

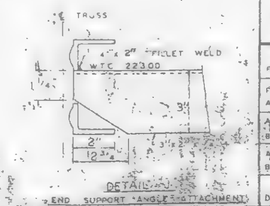
PANEL NO CR3N SIZE 20'-0" x 57'-9"

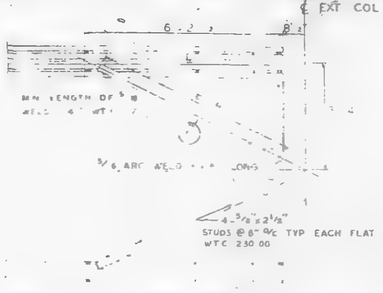












TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	FEI DRWG
FLOOR TRUSSES	T2N	6	C32T27-6 8 1/8"	T27N
BRACING TRUSSES			24T	8T21
	T2	3	24T 2 - 6 3/8"	ST 21
	A1	5	3 x 2 x 4 x 12"	ST 403
ANGLE	A2	4	3 x 3 x 4 x 8"	ST 403
	A3	2	3 x 3 x 4 x 8"	ST 403
	A4	5	3 x 3 x 4 x 8-8	ST 403
PATCH PLATES	PP1	8	9" x 0'-9" x 3/8"	ST 400
	PP2	6	9" x 1'-0" x 3/8"	ST 400
GUSSET PLATES	A	3	9 x 0.35 x 3'-11"	ST 303
	B	6	9 x 0.35 x 5'-2"	ST 303
	C	3	9 x 0.35 x 3'-2 1/2"	ST 303
ANGLE CLIP	C1	21	2 A1 1/2 x 3" x 1'-0 1/8"	ST 400
1" ø SHEAR ANCHOR	SA2	9	1" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2 x 3 1/2 x 3/8" x 3'-6 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-L 1 1/2" x 1 1/4" x	BT 212
			230 x 6'-6 1/8"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .36" x 0'-9"	ST 400
	P3	1	4 1/2" x .36" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	REVISION	BY

REF DRWG

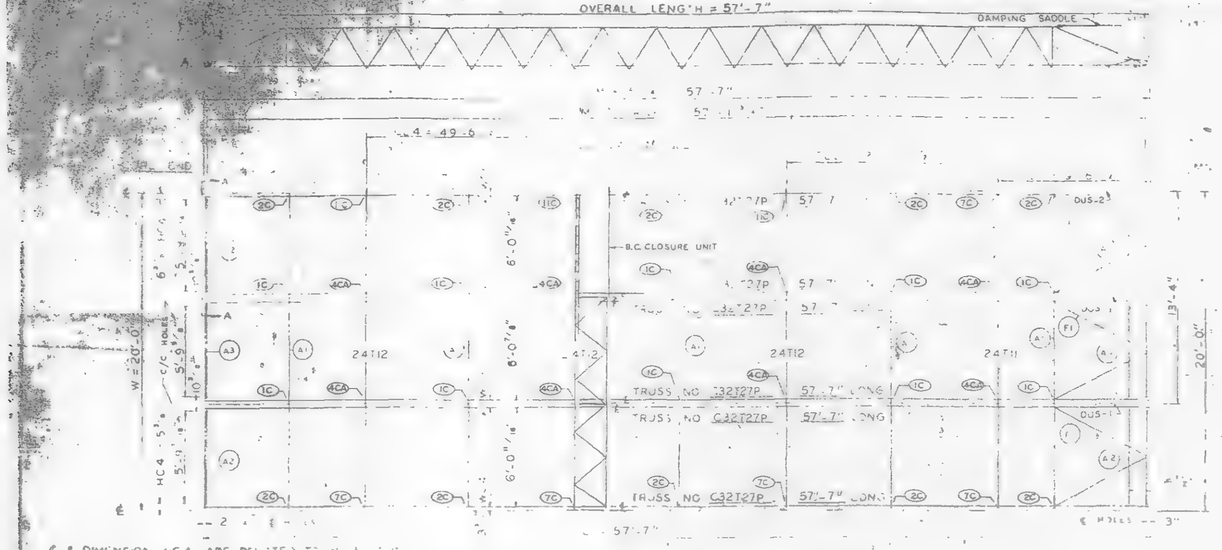
7-AB4-3	10-5-68
3-AB4-15 & 16	7-22-68
7-AB4-41	7-22-68
SA-T24	6-6-68
7-AB3-46	1-6-69
7-AB1-24	1-6-69
7-AB2-6 & 7	7-22-68
7-AB4-42	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG 8 FLOORS 44 (EAST)

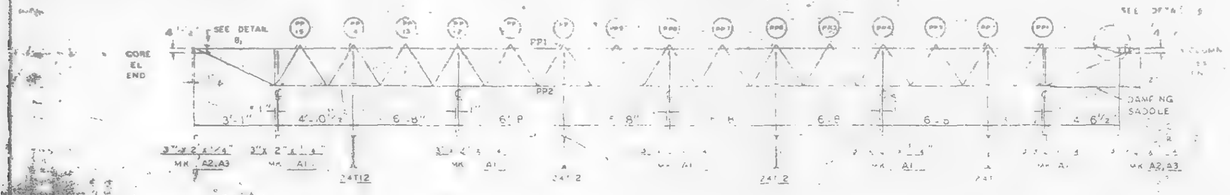
PANEL CR3N - 20'-0" x 57'-9"

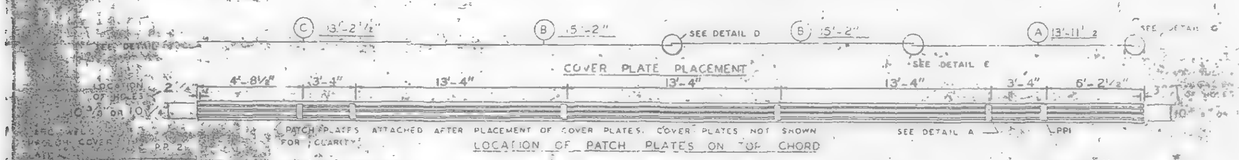
FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	7-AB3-46
APPROVED FOR FABRICATION BY	FOR P.O.N.Y.A.	DATE	7/7/69
DRAWN BY	Lud	DATE	APRIL 28, 1969
APPROVED FOR FABRICATION BY	FOR FABRICATOR	DATE	
CHECKED BY	T.M. CHURA	DATE	APRIL 28, 1969
DETAILED BY	"A" CORRER	FABRICATION CONT. NO. W.T.C.	221
IN CHARGE	PROJ. DEV.	SHEET NO.	FP-R3
PLATE			

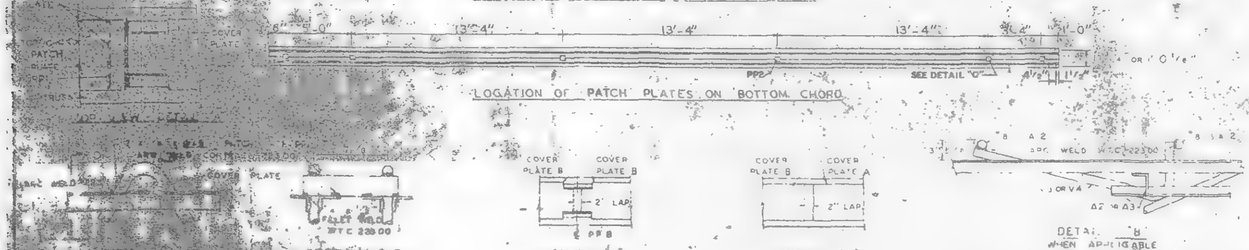


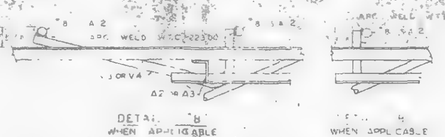
℄ & DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE IN ALIGNMENT WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES

PANEL NO CR3P SIZE 20'-0" x 57'-7"

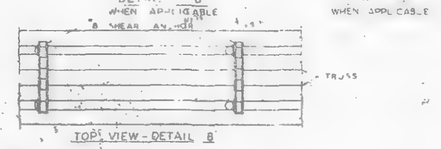




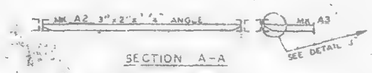


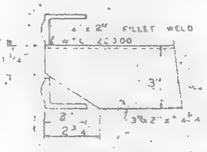


COVER PLATES ¼" & 29 GA. THICK

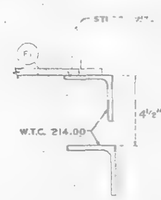


FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
	TOP F		12"x27"x .51"-7"	ST 221
				ST 212
				ST 213
				ST 403
				ST 403
				ST 403
				ST 403
	F1			ST 403
	DD			ST 403
				ST 403
				ST 403
				ST 400
	SA2	9	PL REBAR x 0'-9"	ST 400
	DUS4	2	3"x3"x¾"x3'-6⅞"	ST 298
	DUS2	1	3"x3"x¾"x3'-6⅞"	ST 298
CONNEC. BAR	CB1	4	1"x3", 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x3½"x½"x 230 x 6'-6½"	ST 212 / CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-6½"	ST 400
	P2	4	4½" x .38" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

REF DRWG
- AB4-3 10-15-68
- AB4-15 & 16 7-22-68
- AB4-41 7-22-68
- SA 12-4 1-8-69
- AB3-46 1-8-69
- AB1-24 1-8-69
- AB2-6 & 7 7-22-68
- AB4-42 10-15-68

DOW PANEL DETAILS
FOR
NEW TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG B FLOORS 78 (NORTH)
PANEL SIZE 20'-0" x 57'-7"
BLDG B FLOORS 78 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-483-66
APPROVED FOR FABRICATION BY ENGINEER FOR PORT AUTH. NY DATE 7/8/69
DRAWN BY DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE APRIL 28, 1969
DETAILED BY WYS
FABRICATION CONT. NO. 221
SHEET NO. FP CR3P

OVERALL LENGTH = 59'-8½"

DAMPING SADDLE

59'-8½"

59'-3⅛"

40 P

CO'L END

59'-8½"

TRUSS NO. C32T1B 59'-8½" LONG

24T12

CLOSURE UNIT (BC)

2" ℄ HOLES

59'-8½"

A DIMENSION 'RC' ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN TOP OF COLUMN (CLIPS & BRACES.

PANEL NO. C1B SIZE 20'-0"x59'-8½"

SEE DETAIL

DAMPING SADDLE

5'-2½" 4'-10" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6" 4'-6½"

MK A2,A3 MK A1 MK A1 MK A1 MK A1 MK A1 MK A2,A3

24T12

2'-1" 13'-2½" 15'-2" 19'-2" 3'-1"

SEE DETAIL F SEE DETAIL D SEE DETAIL E SEE DETAIL

COVER PLATE PLACEMENT

6'-10" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2½"

LOCATION OF HOLES 2½" 3⅛ OR 10¾

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLAR

SEE DETAIL A

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-0" 13'-4" 13'-4" 13'-4" 1'-0"

SEE DETAIL C

LOCATION OF PATCH PLATES ON BOTTOM CHORD

COVER PLATE

TOP VIEW DETAIL A

PATCH PLATE PP3

ARC WELD CONTRACT 223 CO

COVER PLATE

DETAIL A

SECTION E-E

COVER PLATE B COVER PLATE A 2" LAP

DETAIL D

COVER PLATE B COVER PLATE A 2" LAP

DETAIL C

ARC WELD WT TO A2 OR A3

A2 OR A3

DETAIL B WHEN APPLICABLE

DETAIL B1 WHEN APPLICABLE

B SEAT ANCHOR

TOP VIEW DETAIL B

COVER PLATES "B" OR "C" TYP

7⅛

WELD WT C 223 CO

DETAIL 'C'

PATCH PLATE WK PP2

SECTION E-E

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE FLAT POSITION UNLESS OTHERWISE STATED. ALL CONNECTING ARC WELDS SHALL BE ⅜" FILLET.

4" 1'-9" COVER PLATE C

END STIFFENER

COVER PLATE D

DETAIL

TO BE NOTCH FOR STIFFENER

COVER PLATE A

DETAIL

SECTION A-A

END SUPPORT ANGLE

℄ EXT COL REF LINE

TYP EACH FLAT

TYPICAL PLAN OF DIAGONAL BRACED FLOOR DECK

STUDS W

W.I.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN. CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL					
MATERIAL					
FLOOR TRUSSES	T1B	18	18 59'-8		22B P
	T1				
	T1A				
	T1C				
	T1D				
	T1E				
	T1F				
	T1G				
	T1H				
	T1J				
	T1K				
	T1L				
	T1M				
	T1N				
	T1P				
	T1Q				
	T1R				
	T1S				
	T1T				
	T1U				
	T1V				
	T1W				
	T1X				
	T1Y				
	T1Z				
	T2	9	24T12 19'-11"		8
	T2A				
	T2B				
	T2C				
	T2D				
	T2E				
	T2F				
	T2G				
	T2H				
	T2J				
	T2K				
	T2L				
	T2M				
	T2N				
	T2P				
	T2Q				
	T2R				
	T2S				
	T2T				
	T2U				
	T2V				
	T2W				
	T2X				
	T2Y				
	T2Z				
ANGLE	A1	9	5"x3½"x⅜"x 19'-11" LLH		ST 40
	A2	4	3"x2½"x¼"x 4'-8" LLH		ST 40
	A3	2	3"x2½"x¼"x 5'-8"		ST 40
	1		1½"x 5'-6"		ST 40
PATCH PLATE	PP1	18	2"x 1'-0"		ST 40
	PP2	16	4"x 5'-0"		ST 40
	PP3				
COVER PLATES	A	3	9"x .035 x 13		ASTM-653
	B	6	9"x .035 x 13'-2		ST 40
	C	3	9"x .135 x 13'-2		ST 40
	D	3	9"x .135 x 2'-2		ST 40
ANGLE CLIPS	C1	21	2½"x2½"x¼"x 10"		ST A00
⅞ SHEAR ANCHOR	SA2	12	⅞ SHEAR ANCHOR		
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x 8'-0" LLH		ST 40
	DUS-2	2	3½"x3½"x⅜"x 8'-0" LLH		ST 40
CONNECTION BAR	CB1	4	1"x 1'-3"		ST 40
CLOSURE UNIT	BC	8	12"x1½"x¼"x		ST 40
			8'0" x 8½" x ¼"		ST 40
CONNECTION PLATES	P1	5	5"x5"		ST 40
	P2	4	4"x 1'-0" x 2'-0"		ST 40
	P3	1	3½"x 1'-0" x ½"		ST 40

LETTERS AND NUMBERS IN ELLIPSES ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	REVISION
1	8-5-69	AS NOTED

REF DRWG

CD PANEL DETAIL

WORLD TRADE CENTER

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 83-91, 93-106 (N)

BLDG. B FLOORS 83-91, 93-106 (S)

FABRICATION BY LACLEDE STEEL

FABRICATED MADISON, ILLINOIS

APPROVED FOR FABRICATION

APPROVED FOR ERECTION

OVERALL LENGTH = 58'-8"

DAMPING SADDLE

L = 5'-1" = 58'-8"

TRUSS HOLES = 58'-2¾"

CORE END

TRUSS NO. C32T1H 58'-8" LONG

TRUSS NO. C32T1H 58'-8" LONG

TRUSS NO. C32T1H 58'-8" LONG

TRUSS NO. C32T1H 58'-8" LONG

CLOSURE UNIT (BC)

TRUSS NO. C32T1H 58'-8" LONG

24T12

2¼ ø HOLES

12 = 58'-8"

DIMENSION MCA ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES.

PANEL NO C1H SIZE 20'-0" x 58'-8"

SEE DETAIL A

CORE END

DAMPING SADDLE

SEE DETAIL F

SEE DETAIL D

SEE DETAIL E

COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION PATCH PLATES ON BOTTOM CHORD

TOP VIEW DETAIL A

DETAIL B

DETAIL C

DETAIL D

DETAIL E

DETAIL F

SECTION E-E

TOP VIEW DETAIL B

SECTION A-A

DETAIL G

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.

TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL CROSS BRACE & TYP. DECK B W.T.C. 223

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

LETTERS AND NUMBERS IN ELLIPSES, ie. (CC) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

REQUIRED MATERIAL

MATERIAL	MK	CC'S			
FLOOR TRUSSES	T1H	4	32T1H 58'-8"		2 2200 H
	T12	3	24T12 58'-8"		
	A1	5	3"x2½"x¼" x 4'-8"	81.40	
ANGLES	A2	6	3"x2½"x¼" x 5'-1"	88.40	
	A3	7	3"x2½"x¼" x 5'-1"	88.40	
HORIZONTAL PLATES	F1	6	1½" x 9" x 4'-0"	ST 400	
PATCH PLATES	PP1	18	3"x¼" x 0'-9"	ST 400	
	PP2	18	3"x¼" x 0'-9"	ST 400	
COVER PLATES	A	2	9"x.0239"x58'-8"		
	B	4	9"x.0239"x58'-8"		
	C	2	8"x.0239"x58'-8"		
	D	3	.0239"		
ANGLE CLIPS	CC1	24	3"x2½"x¼" x 0'-5"		
TIE BAR ANCHOR	SAT	9			
DAMPING SADDLE	DUS-1	2	3"x2½"x¼" x 0'-5"		
	DUS-2	1	3"x2½"x¼" x 0'-5"		
CONNECTION BAR	CB1	4	1"x6" x 1'-3"	ST 400	
CLOSURE UNIT	BC	3	2"x1½"x¼" x 0'-5"		
CONNECTION PLATES	P1	5	3"x6" x 0'-6"		
	P2	4	4½"x.30" x 0'-5"	ST 400	
	P3	1	4½"x.30" x 1'-3"	ST 400	

NO.	DATE	REVISION
1	6-6-65	AS NOTED

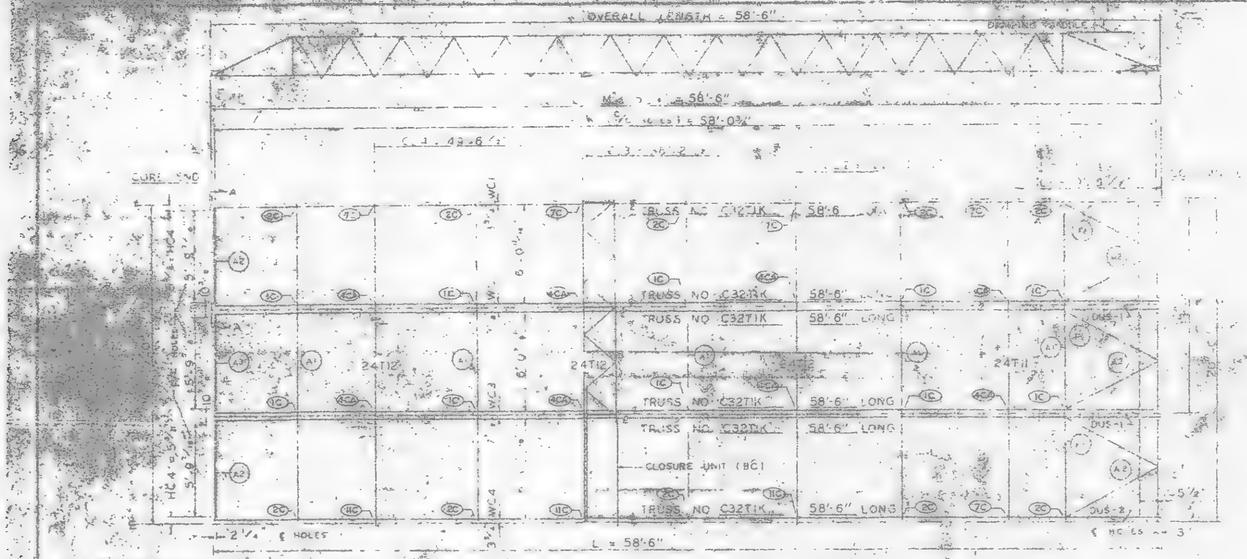
BLDG. 79-80(N)

PANEL C1H SIZE 20'-0" x 58'-8"

BLDG. B FLOORS 79-80 (WEST)

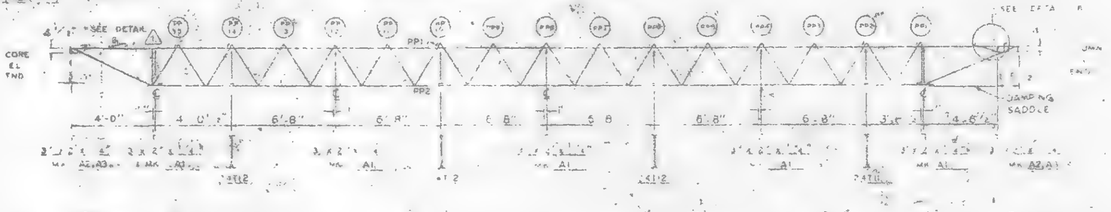
DESIGN DRAWING NO. T-22568 SHT. 1

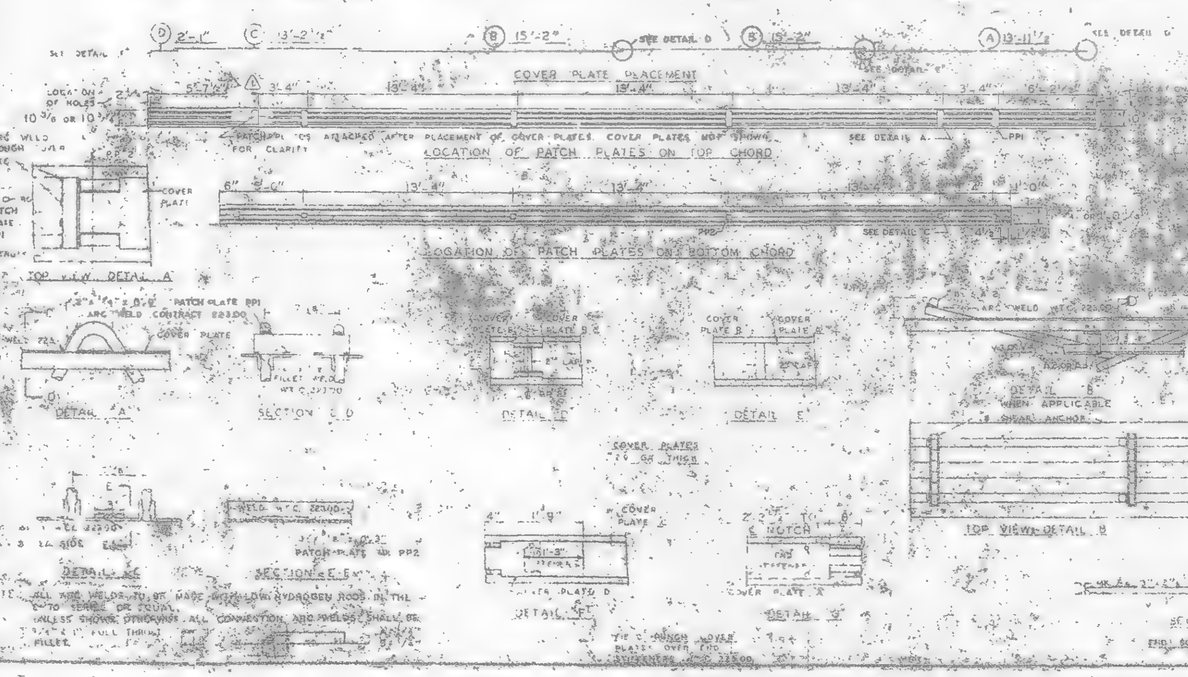
DATE 6-24-65



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE '1' ON THE COLUMN CLIPS & BRACES

PANEL NO C-K SIZE 20'-0" x 58'-6"





NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN ROD IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1K	1	L32T1K 58'-6"	
	T2K	3	24T12 19'-11"	
BRIDGING TRUSSES	B1	2	5 x 2½ x ⅜ x 9'-11"	ST 400
3½ x 3½ x ⅝ ANGLE	A2	6	3 x 2½ x ¼ x 5'-11"	ST 400
	A3	2	3 x 2½ x ¼ x 1'-4"	ST 400
DIAGONAL FLATS	F1	8	5 x ⅜ x 1'-5"	ST 400
PATCH PLATES	PP1	8	2'-8" x 1'-4" x ⅜"-8	ST 400
	PP2	18	3'-6" x 1'-6" x ⅜"	ST 400
COVER PLATES	A	3	9" x 3/16" x 13'-2"	ST 400
	B	3	9" x 0.125" x 13'-2"	ST 400
	C	3	6" x 0.125" x 13'-2"	ST 400
	D	3	6" x 0.125" x 1'-11"	ST 400
ANGLE CLIPS	C1	8	5" x 3½" x ½" x 4" x 0'-6"	ST 400
⅞ ø ANCHOR ANCHOR	SA2	9	⅞ ø REBAR x 1'-0"	ST 400
DAMPING SADDLE	DUS-1	2	5½" x 3⅜" x ⅜" x 5'-0⅞"	ST 400
	DUS-2	1	3½" x 3½" x ⅜" x 3'-0⅞"	ST 400
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 x 1½" x 1" x 1'-4"	ST 400
			230 x 6'-8 5/8"	LO 350
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 3'-6 5/8"	ST 400
	P2	4	4'-2" x ⅜" x 0'-9"	ST 400
	P3	1	4'-6" x ⅜" x 1'-0"	ST 400

NO.	DATE	REVISION
1	6-8-69	AS NOTED

REF DRWG 7 404.1
2 404.3 & 4
5 403.2
1 403.2
7 403.1
4 403.6
4 403.5

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER IN N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG 1 FLOORS 45(S), 46(N&S)
PANEL DIAG. TYP. 58'-6"
BLDG. 2 FLOORS 45(EAST) 46(EAST & WEST)

FABRICATED BY LACLEDE STEEL COMPANY
ERECTED
AT MADISON, ILLINOIS
DESIGNED BY [illegible]
DRAWN BY [illegible]
CHECKED BY [illegible]
APPROVED FOR FABRICATION
DATE 10-24-68
FOR ERECTION
DATE 10-29-68
DESIGN DRAWING NO. 7335.7
BUILDING
SHEET NO. CD 203
FABRICATION COPY NO. 1 OF 1

OVERALL LENGTH = 57'-7"

DAMPING SADDLE

L = 57'-7"

L = 49'-5"

L = 28'-10"

COLUMN NO.

TRUSS NO. C32TIP 57'-7" LONG

CLOSURE UNIT (BG)

24T12

4 6T2 TYP. EACH FLAT

EXT COL. REF. LINE

TYPICAL PLAN OF FLOOR TRUSSES

STUDS

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL						
FLOOR TRUSSES	PT	4	32TIP	57'-7"		
BRIDGING TRUSSES	T2					
3½" x 4" ANGLE	A1					
	A2					
	A3					
DIAGONAL FLATS	F					
PATCH PLATES	PP1	18	2'-3"	1'-3"	3/8"	22.95
	PP2	18	2'-3"	1'-3"	3/8"	22.95
CLIP						
SHEAR UNIT						
SAG ROD	DSR2	11				
CONNECTION BAR	CB1	4				
CLOSURE UNIT	BG	8				
CONNECTION PLATES	P1	13	5'-1"	2'-0"	ST 450	
	P2	4	4'-6"	2'-0"	ST 450	
	P3	1	4'-6"	2'-0"	ST 450	

PANEL NO. CIP SIZE 20'-0" x 57'-7"

SEE DETAIL

CORE END

COLUMN END

JUMPING SADDLE

3'-1" 4'-0" 6'-8" 6'-8" 6'-8" 5'-8" 6'-8" 6'-8" 3'-6½"

MK A2/A3 MK A1 MK A1 MK A1 MK A2/A3

24T12 24T12 24T12

D 2'-1" C 13'-2½" B 15'-4½" SEE DETAIL D B 15'-2" SEE DETAIL E A 13'-11"

COVER PLATE PLACEMENT

LOCATION OF HOLES 10 4⅝ OR 10 5⅛

3'-4" 13'-4" 13'-4" 3'-4" 6'-2½"

10 4⅝ OR 10 3¼

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES (COVER PLATES NOT SHOWN ON D UNIT)

SEE DETAIL A L PP1

LOCATION OF PATCH PLATES ON TOP CHORD

WELD COVER PLATE

TOP CHORD PATCH PLATE PP1

COVER PLATE

PP2

SEE DETAIL C

LOCATION OF PATCH PLATES ON BOTTOM CHORD

END VIEW DETAIL 'A'

PATCH PLATE PP1 6" x 0'-2" x 7/16" ARC WELD CONTRACT 223.00

COVER PLATE

DETAIL 'A'

FILLET WELD WT 223.00

SECTION C-D

COVER PLATE B COVER PLATE B

2" LAP

DETAIL 'D'

COVER PLATE A COVER PLATE A

2" LAP

DETAIL 'E'

ARC WELD WT.C. 223.00

DETAIL 'B' WHEN APPLICABLE

ARC WELD WT.C. 223 DC

VIEW R WHEN APPLICABLE

SHEAR ANCHOR

TRUSS

TOP VIEW - DETAIL 'B'

COVER PLATES 2.0 GA. THICK

ARC WELD WT.C. 223.00

PATCH PLATE PP1

DETAIL 'C'

COVER PLATE

RIVET CUT OFF WT.C. 223

DETAIL 'F'

2" TO 8" ENOUGH TO BE EFFECTIVE

COVER PLATE A

DETAIL 'G'

FIELD FINISH TOPS OF CHORDS

NOTE: ALL WELDING TO BE MADE WITH LOW HYDROGEN RODS IN THE SHAPES OF EQUAL LEGS UNLESS OTHERWISE NOTED. ALL CONNECTION ARC WELDS SHALL BE FILLET WELDS THAT ARE

SECTION A-A AND DIAGONAL ANGLES

TRUSS

2" FILLET WELD WT.C. 223.00

DETAIL

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISIONS
1	6-6-69	A3 NOTED

REF. DRWG

FLOOR PANEL DETAILS FOR WORLD TRADE CENTER FOR THE PORT OF NEW YORK AUTHORITY

BLDG A FLOORS 74 (N)

BLDG B FLOORS 74 (WEST)

FABRICATION BY MADISON INDUSTRIES

ERECTION BY

DRAWN BY

CHECKED BY

DATE 5-24-68

APPROVED BY W. LEWIS

OVERALL LENGTH = 58'-3"

DAMPING SADDLE

L = 58'-3"

TRUSS NO C32TM 58'-3" LONG

TRUSS NO C32TM 58'-3" LONG

TRUSS NO C32TM 58'-3" LONG

CLOSURE UNIT (BC)

TRUSS NO C32TM 58'-3" LONG

24T12

60'-0"

2 E HOLES

3 E HOLES

℄ DIMENSION HC4 ARE RELATED TO HOLES FOR IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO C1M SIZE 20'-0" x 58'-3"

SEE DETAIL A

SEE DETAIL B

COVER PLATE PLACEMENT

LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP CHORD PATCH PLATE PP1

COVER PLATE

TOP VIEW DETAIL A

PATCH PLATE PP1

ARC WELD CONTRACT 223 DD

ARC WELD 223

DETAIL A

SECTION B-B

DETAIL D

DETAIL E

COVER PLATES 2" LAP

COVER PLATES 2" THICK

DETAIL C

SECTION E-E

PATCH PLATE MK PP2

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE

FILLET WELDS WITH 223 DD

ARC WELD W.P.C. 223 DD

DETAIL "B" WHEN STEEL CABLE

WHEN ARCH USE

3 SHEAR ANCHOR

TOP VIEW DETAIL B

SECTION A-A

END SUPPORT ANGLE

REF LINE

STUDS

W.P.C. 214 DD

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4"x6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATES	A	6	8 x 30'-0" x
	B	6	8 x 30'-0" x
	C	3	6" x 0'-8" x
	D	3	2" x 0'-8" x
ANGLE CLIPS	C1	81	3" x 4" x
S. SHEAR ANCHOR	SAC	9	5 x 6"
DAMPING SADDLE	DS	2	1'-6" x 2'-6" x 8" x 3'-8"
CONNECTION BAR	CB1	4	1" x 8" x 1'-3"
CLOSURE UNIT	BC	3	2'-6" x 1'-8" x 2'-10" 230 x 8
CONNECTION PLATES	P1	5	3" x 8" x 0'-6"
	P2	4	4" x 8" x 30"
	P3	1	4" x 8" x 3'-0"

LETTERS AND NUMBERS IN ELLIPSES ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	
1	6-6-69	AS NOTED

REF DRWG

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 72-73 (WEST)

LACLEDE STEEL COMPANY

FABRICATED AT WILMINGTON, ILLINOIS

ERECTION

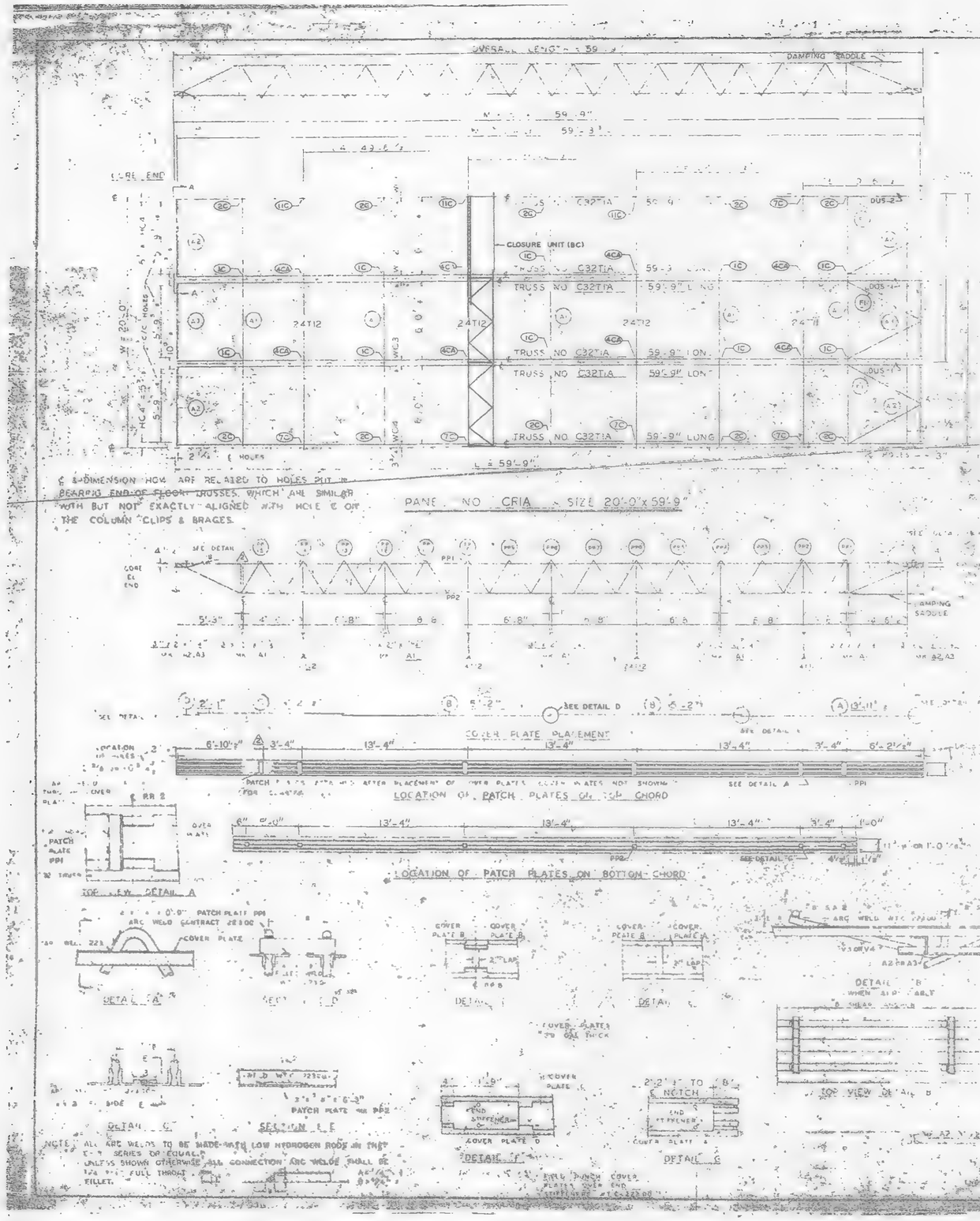
SHOP WELD TO FABRICATION

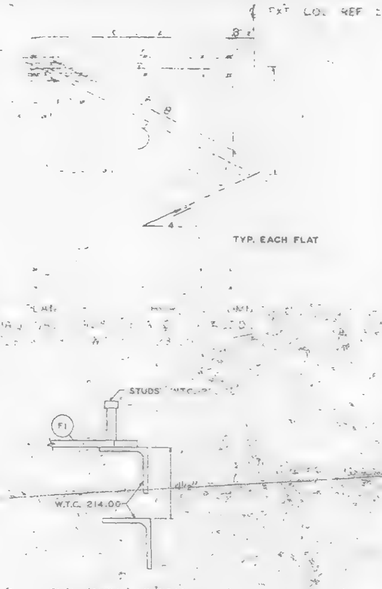
FOR FABRICATION

DESIGN DRAWING

CHECKED

DATE





REQUIRED MATERIAL FOR PANEL				
MATERIAL	MK	PCS	SIZE	DRWG.
CHORD TRUSSES	T1A	6	C32T1A - 59'-9	ST 298
WEB MEMBERS	T1		24" x 6" x	ST2
	T1.2	1	24" x 6" x	ST 2 2
TOP & BOTTOM ANGLE	A1	5	3" x 2" x 4" x 19'-1"	ST 403
	A2	4	3" x 2" x 4" x 5'-10"	ST 403
	A3	2	3" x 2" x 4" x 4'-2"	ST 403
	P1	5	1/2" x 8" x 6'-0"	ST 402
PATCH PLATES	PP1	18	2'-0" x 6" x 1/2"	ST 400
	PP2	18	2'-0" x 6" x 1/2"	ST 400
COVER PLATES	A	3	9" x 1/2" x 19'-1"	ST 303
	B	6	9" x 1/2" x 5'-10"	ST 303
	C	3	9" x 1/2" x 4'-2"	ST 303
	D	3	9" x 1/2" x 2'-1"	ST 303
ANGLE CLIPS		21	2" x 2" x 4" x 0'-6"	ST 400
7/8" Ø SHEAR ANCHOR	SA2	12	7/8" Ø STUD x 0'-5"	ST 400
DAMPING SADDLE	DUS 2	2	3/8" x 3" x 4" x 3'-6 7/8"	ST 298
	DUS 2.1	1	3/8" x 3" x 4" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1" x 3'-4"	ST 400
CLOSURE UNIT	BC	3	2" x 1 1/2" x 1 1/4" x 2'-3 0"	ST 212
				CD 204
CONNECTION PLATES	P1	5	3/16" x 3" x 8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-8"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

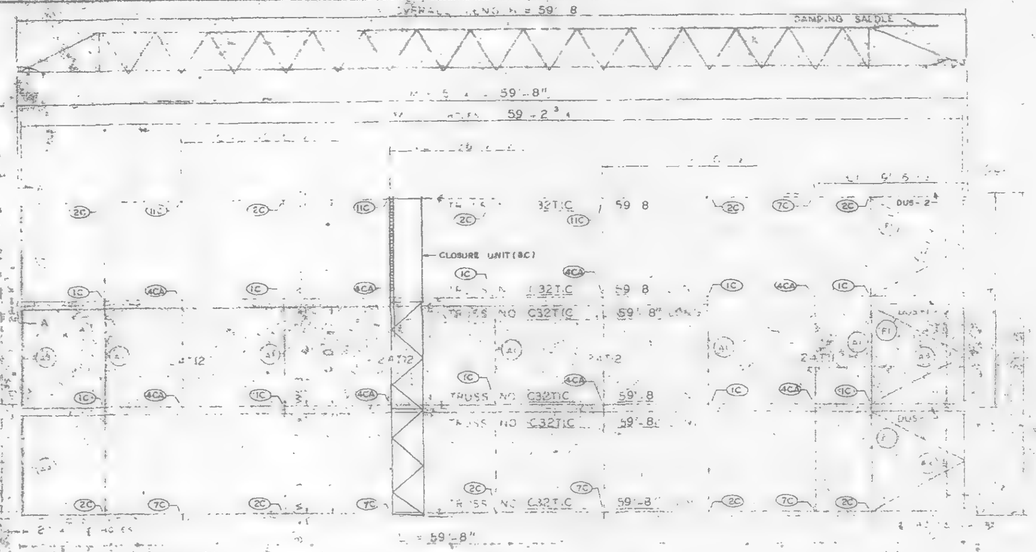
NO.	DATE	REVISION	BY
4	6-6-69	AS NOTED	GDC
3	7-17-68	GENERAL	TM

REF DRG.
- SC AB4-2 10-15-68
- SC AB4-1 & 6 7-22-68
- SC AB4-41 7-22-68
- SA-12 6 1-6-69
- SC AB3-2 10-15-68
- SC AB1-6 7-22-68
- SC AB2-1 & 7 7-22-68
- SC AB4-42 10-15-68

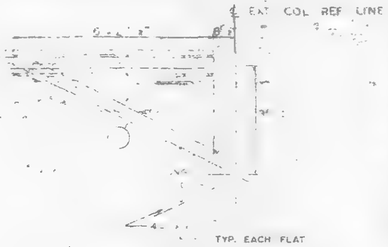
FLOOR PANEL DETAILS
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

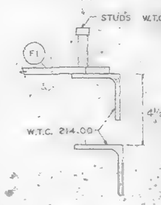
BLDG. A FLOORS 4-24, 26-38 (NORTH & SOUTH), 49-58, 60-69, 88
PANEL C1A1A SIZE 20'-0" x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST)

FABRICATED BY LALLY STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7384-B 4-1668 SHEET 1 OF 1
APPROVED FOR FABRICATION BY [illegible] DATE
DRAWN BY [illegible] DATE APRIL 15, 1969
APPROVED FOR FABRICATION BY [illegible] DATE
CHECKED BY [illegible] DATE APRIL 10, 1969
FOR FABRICATION
FABRICATION CONTROL NO. W.T.C. A-201
SHEET NO. C1A1A



E & DIMENSION ARE RELATED TO HOLES AT BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE CTRS IN THE COLUMN CLIPS & BRACES

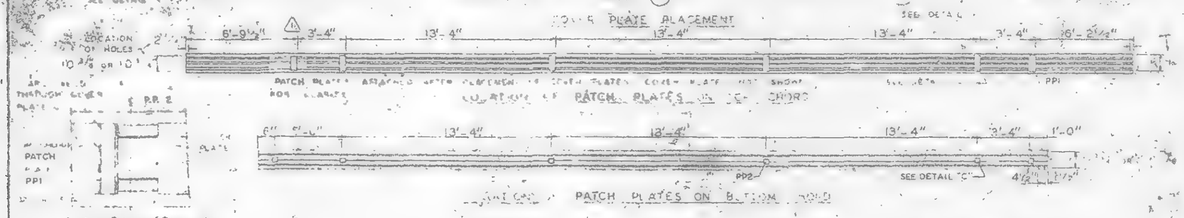




CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SPEC OR DRWG.
FLOOR TRUSSES	TC	6	C32T1C - 59'-8"	ST 70C
BRIDGING TRUSS	BT	1	24T12 - 19'-11"	BT212
	BT2	3	24T12 - 19'-11"	BT212
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/4"	ST 403
DIAGONAL FLATS	DF	6	1 1/2" x 7" x 6'-6 3/8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 3'-4"	ST 400
	PP2	18	3" x 1/4" x 6'-3"	ST 400
COVER PLATES	A	18	9" x 0'-10 5/8" x 5/16"	ST 400
	B	18	9" x 0'-10 5/8" x 5/16"	ST 400
	C	4	8" x 0'-10 5/8" x 3/16"	ST 400
	D	3	10" x 0'-10 5/8" x 3/16"	ST 400
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-10"	ST 400
7/8" ø SHEAR ANCHOR	SA2	12	7/8" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS4	2	3 1/2" x 3 1/2" x 3" x 3" x 3 6"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3" x 3" x 3 6"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 @ 3 1/2" x 1 1/4" x 230 x 8'-6 1/2"	BT212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/4" x 0'-8 1/2"	ST 400
	P2	9	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400

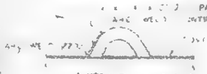
LETTERS AND NUMBERS IN ELLIPSES ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

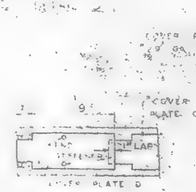


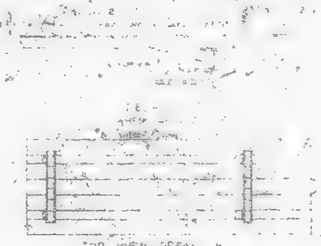
PATCH PLATES ARRANGED AFTER PLACEMENT OF BOTH PLATES COVER PLATE NOT SHOWN

PATCH PLATES IN TOP CHORD

PATCH PLATES ON BOTTOM CHORD







NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS, IN THE ELECTRODES FOR EQUIVALENT STRENGTH. FILLET WELDS SHOWN OTHERWISE, ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

DETAIL E SECTION E

DETAIL F

F.C.U. BUNCH CORE PLATES OVER END STIFFENERS WITH 2 RAD

END SUPPORT DETAIL ATTACHMENTS

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GD

ALT DRWG
- AB4-3 10-15-68
- AB4-15,16 & 39 7-22-68
- AB4-41 7-22-68
- AB4-42 10-15-68
- AB4-2 1-3-68
- AB1-2 7-22-68
- AB2-6 & 7 7-22-68
- AB4-42 10-15-68

PANEL DETAILS FOR [illegible] CENTER N.Y.C. FOR NEW YORK AUTHORITY

49-58, 60-66, 68-74, 79-91 & 93-106

PANEL CRIC - 40'-0"

BLDG. B FLOORS 49-58, 60-74, 79-91 & 93-106

[illegible] STEEL COMPANY

[illegible] MADISON, ILLINOIS

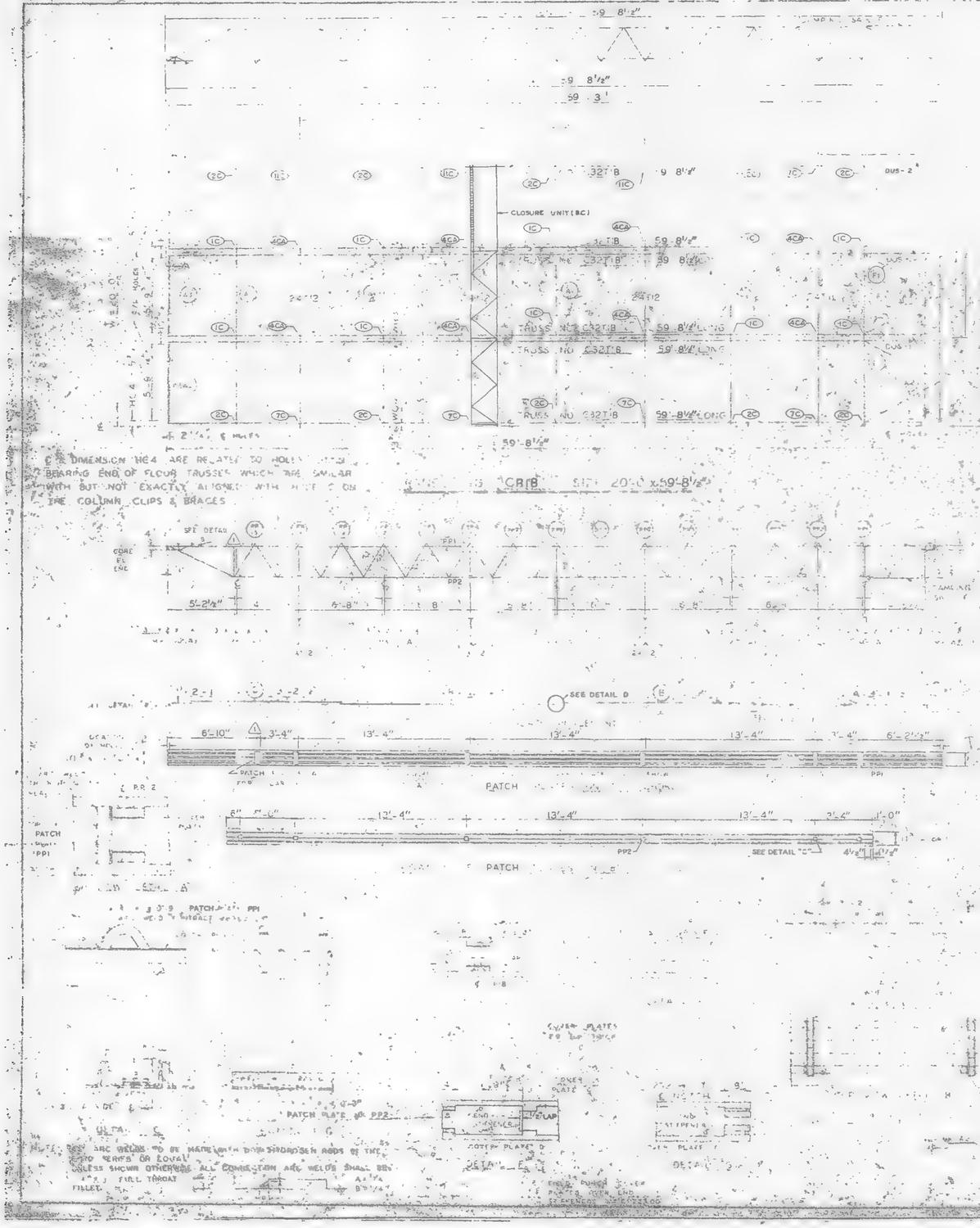
DESIGN DRAWING NO. 1 AB1-B

APPROVED FOR FABRICATION BY [illegible] DATE

APPROVED FOR ERECTION BY [illegible] DATE

DRAWN BY [illegible] DATE OCT 23 1968

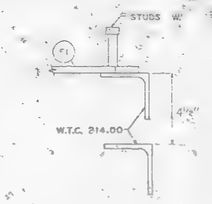
CHECKED BY [illegible]



℄ DIMENSION HE4 ARE RELATED TO HOLE [illegible] BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE [illegible] ON THE COLUMN CLIPS & BRACES

CRIB SIZE 20'-0 x 59'-8½"

ARC WELDS TO BE MADE WITH DOUBLE PASS OF THE SIZE SHOWN UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

TYP. EACH FLAT

REQUIRED MATERIAL - EACH PANEL				
MATERIAL	MK	NO.	SIZE & LENGTH	SEE DRWG
	B	8	W21 x 44 - 59 8½"	CD 201-B
			W21 x 44 - 59 8½"	CD 201-A
			W12 x 26 - 9'-1"	ST 212
	A1	3	3 x 2½ x ¼ x 15'-11"	ST 403
	A2	4	3 x 2½ x ¼ x 5'-11½"	ST 403
			3 x 2½ x ¼ x 3'-4"	ST 403
			1 - 6 9	ST 402
PATCH PLATES	PP1	18	¼" x 1'-6" x 9'-1"	ST 400
	PP2	18	¾" x 1'-6" x 9'-1"	ST 400
COVER PLATES	A	3	5/16 x 2'-3½" x 13'-1½"	ST 303
	B	6	5/16 x 2'-3½" x 15'-2"	ST 303
	C	3	5/16 x 2'-3½" x 13'-2"	ST 303
	D	3	5/16 x 2'-3½" x 2'-1½"	ST 303
ANGLE CLIPS	C1	24	2 - 4 x 3½ x ¼ x 10'-6"	ST 400
#8 SHEAR CONNECTOR	SA2	12	#8 REBAR x 0'-8"	ST 400
CAMPING SADDLE	DUS 2	2	3½ x 3½ x ⅜ x 3'-6⅜"	ST 298
	DUS 2	1	3½ x 3½ x ⅜ x 3'-6⅜"	ST 298
CONNECTION BAR	CB1	4	⅝" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 - W12 x 26 x 1'-9" x 230 x 6'-6½"	ST 212 CD 204
CONNECTION PLATES	P1	8	⅜" x 3'-6" x 0'-8½"	ST 400
	P2	4	¼" x .38" x 17'-0"	ST 400
	P3		¼" x .38" x 17'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR, CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

A36 - 2	10-15-68	
A36 - 5,16	7-22-68	
A36 - 4	7-22-68	
SA 24	1-6-69	
A283 - 2	3-5-68	
A36 - 2	7-22-68	
A36 - 6 & 7	7-22-68	
A36 - 42	10-15-68	

WORLD TRADE CENTER N.Y.C.

83-91 & 93-106 (N)

PLOT CD. 59'-8½"

BLDG. B FLOORS 83-91 & 93-106 (WEST)

BUILT BY: ALLIED STEEL COMPANY

ERECTED BY: MALDON, ILLINOIS

DESIGN DRAWING NO. 7 283 B

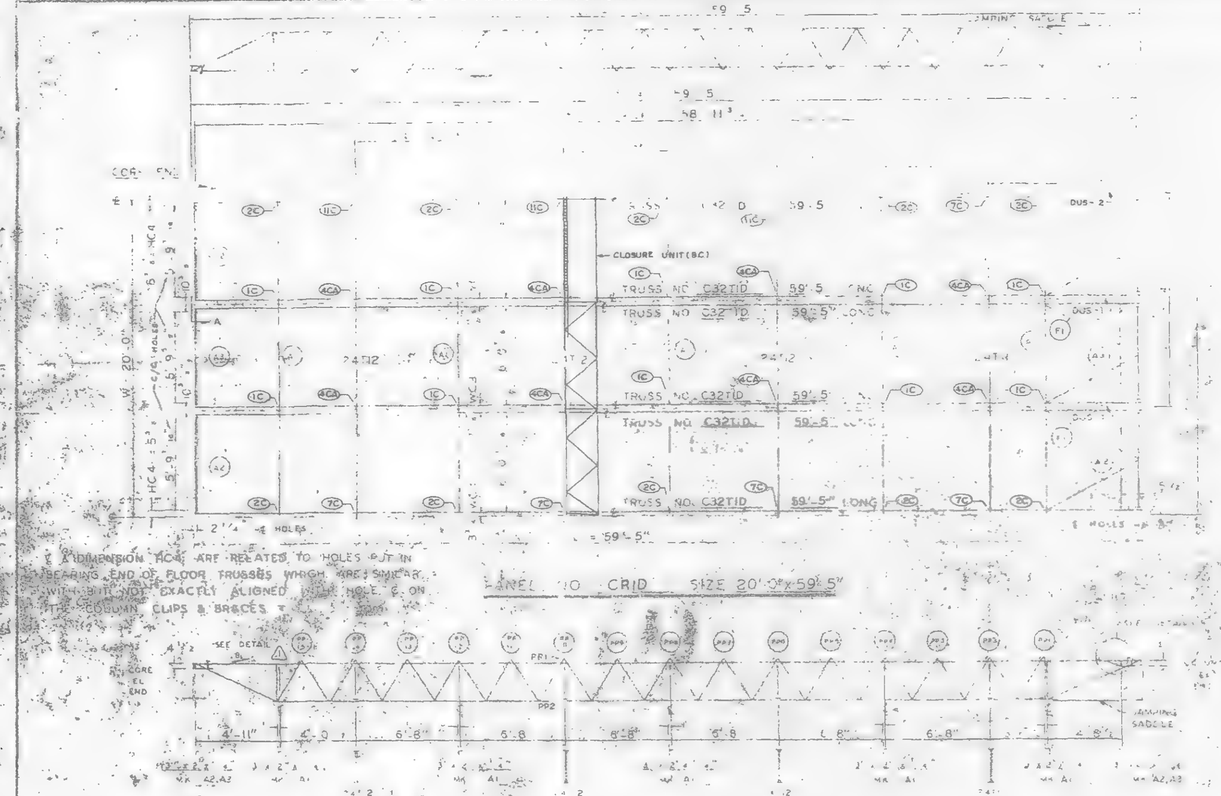
APPROVED FOR FABRICATION — DATE — DRAWN BY —

BY — DATE — DATE OCT 28

APPROVED FOR FABRICATION — DATE — CHECKED BY —

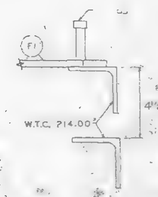
BY — DATE — DATE OCT

DETAILED BY — DATE — APPROVED —



1. DIMENSION HC4, ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE 6 ON THE COLUMN CLIPS & BRACES.

2. ALL WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 7/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

TYP EACH FLAT

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
TRUSS	D	1	32TID - 59'-5"	32TID
	T1	1	24T - 9'-11"	8T212
	T2	3	24T - 19'-11"	8T212
ANGLES	A1	8	3 x 2 1/2 x 1/4 x 9'-1"	ST 403
	A2	4	3 x 2 1/2 x 1/4 x 5'-11 15/16"	ST 403
	A3	2	2 1/2 x 1 1/4 x 5'-11 7/16"	ST 403
	C1	6	2 x 6 x 5'-8"	ST 402
PATCH PLATES	PP1	18	2 1/2 x 1/4 x 0'-5"	ST 400
	PP2	18	3 x 3/8 x 0'-3"	ST 400
COVER PLATES	A	3	9 x 0.135 x 13'-11 7/16"	ST303
	B	6	9 x 0.135 x 15'-2 1/2"	ST303
	C	3	9" x 0.135" x 13'-2 1/2"	ST303
	D	3	9" x 0.135" x 2'-1"	ST303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
3/4" ø SHEAR ANCHOR	SA2	8	3/4" ø REBAR x 0'-8"	ST 15
DAMPING SADDLE	DUS-2	2	3 1/4" x 3 1/2" x 3/8" x 5'-0"	ST 403
	DUS-2	1	3 1/4" x 3 1/2" x 3/8" x 5'-6"	ST 403
CONNECTION BAR	CB1	2	1 1/2" x 3" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 1/2" x 2" x 1 1/4" x 0'-6"	ST 403
CONNECTION PLATES	P1	5	3/4" x 7" x 8"	ST 400
	P2	4	4 1/2" x .30" x 0'-8"	ST 400
	P3	1	4 1/2" x .36" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, i.e. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDA

REF DRWG		
	7x [illegible]	10-15-68
	A84-15,16 A39	7-22-68
	A84-41	7-22-68
	SA-12N	1-6-69
	A83	5-68
	481	7-22-68
	7-A82-8 & 7	7-22-68
	A84-42	10-15-68

PRECAST PANEL DETAILS

FOR

WORLD TRADE CENTER - NEW YORK

THE PORT OF NEW YORK AUTHORITY

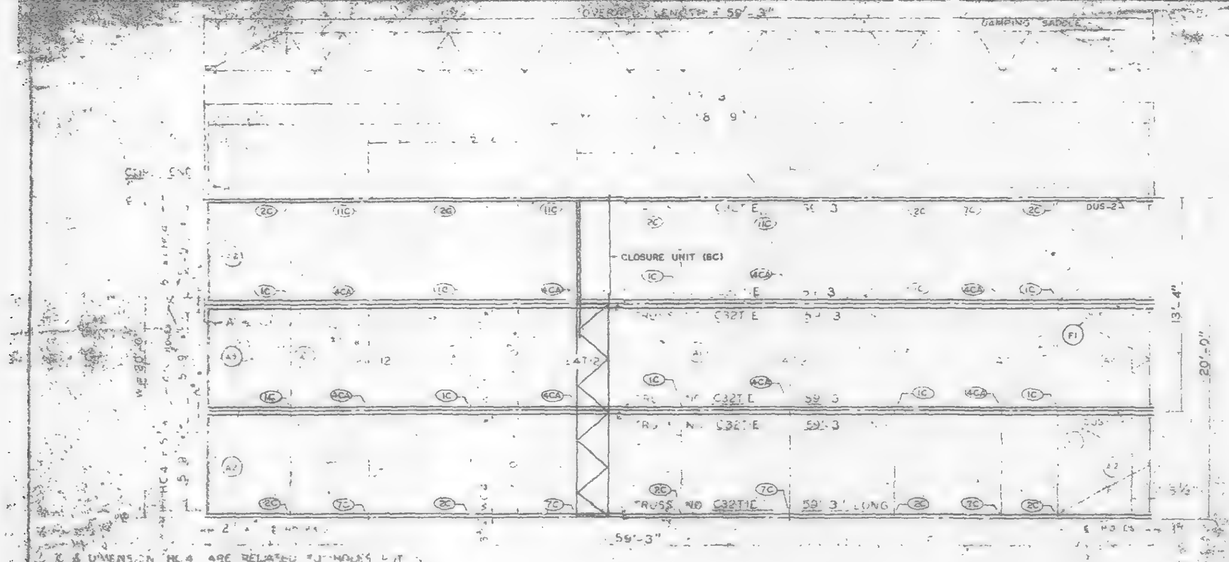
CONTRACT NO. 81-82 (N)

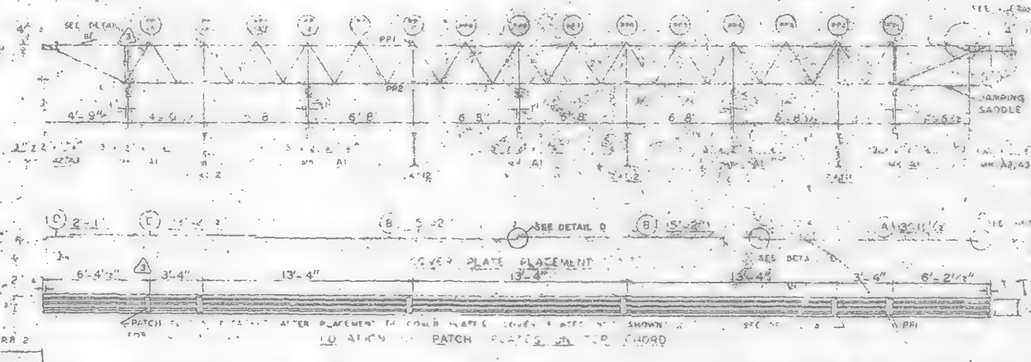
PANEL GRID - 20'-0"

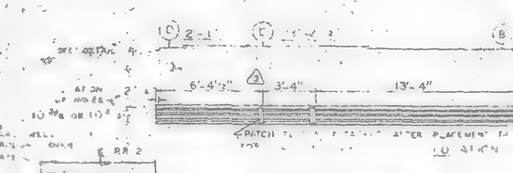
BLDG. 5 FLOORS 81-82 (WEST) 1

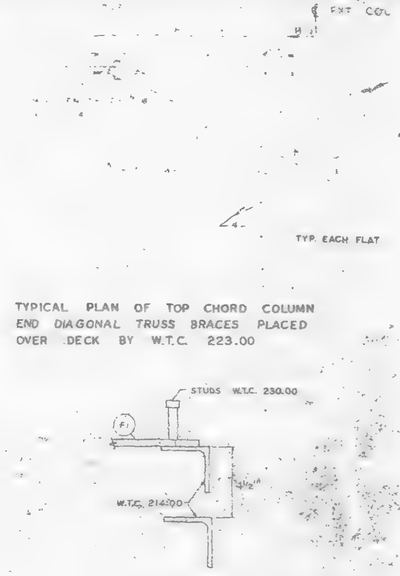
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NOS. 7-A83-8	
APPROVED FOR FABRICATION BY [illegible] FOR PORT AUTH.	DATE:	DRAWN BY: [illegible] DATE: OCT 23 1968	CHK
APPROVED FOR FABRICATION BY [illegible]	DATE:	CHECKED BY [illegible] DATE: OCT 23 1968	
DETAILED BY [illegible]		FABRICATION DRG. NO. [illegible] DATE: [illegible]	









TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	NO.	SIZE	WT.
FLOOR TRUSS				
PATCH PLATES	PP1	18		ST 400
	PP2	18		ST 400
ANGLE CLIPS		24	2" x 2" x ½"	ST 400
⅞" SHEAR ANCHOR	SA2	9	5 STUDS @ 0'-8"	ST 400
DAMPING SADDLE	DUS-2	1	3'-0" x 3½" x ⅜" x 0'-6"	ST 400
CONNECTION BAR	CB1	6	3/8" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2 @ 1'-2" x 1'-½" x 230 x 5-6 1/16"	ST 400
CONNECTION PLATES	P1	5	3'/8" x 2'-8" x 0'-6"	ST 400
	P2	4	4'-1/8" x .38" x 0'-3"	ST 400
	P3	1	6'-1/8" x .25" x 1'-0"	ST 400

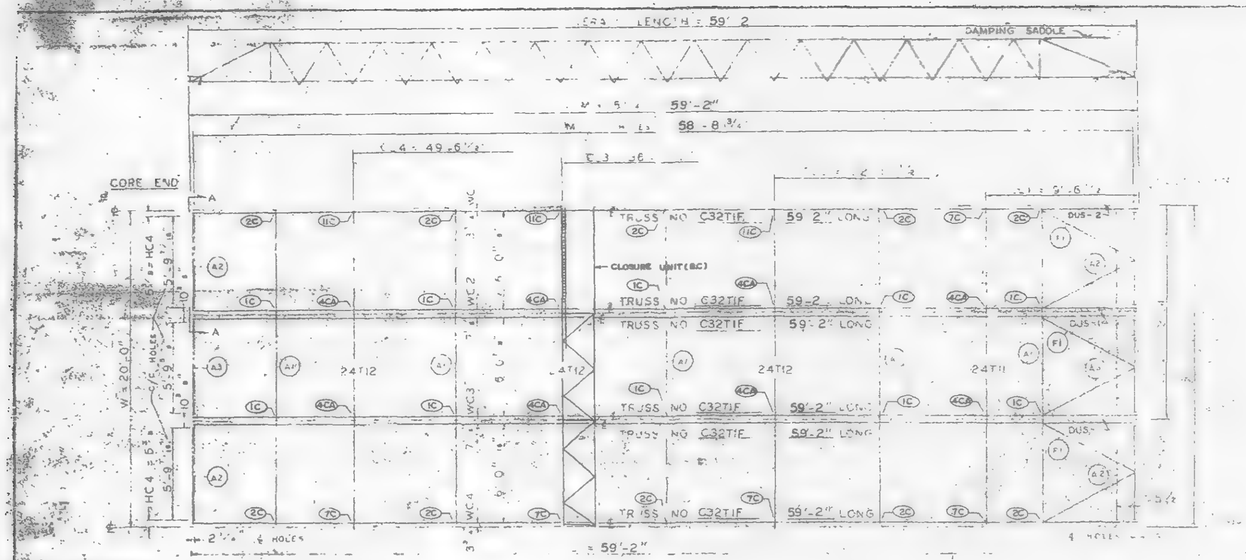
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISIONS
3	8-9-68	AS NOTED
2	10-16-68	MAT'L LIST
1	7-17-68	GENERAL

10-11 (SOUTH)

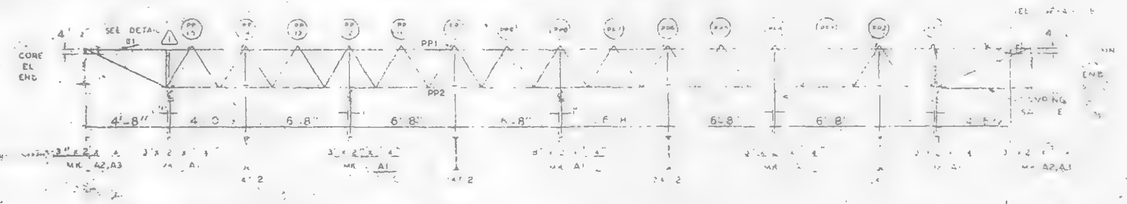
CRIE

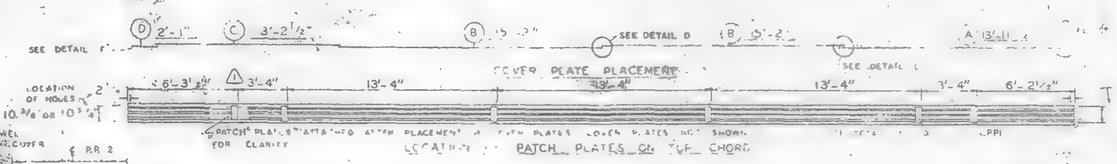
NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE 6010 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.

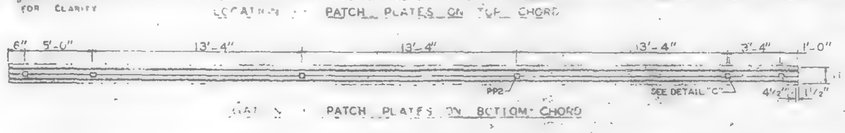


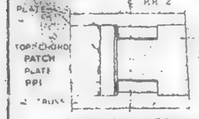
2"ø DIMENSION HC4 ARE RELATED TO HOLES PUNCHED IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES ON THE COLUMN CLIPS & BRACES

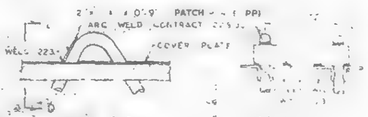
PANEL NO C20IF SIZE 20'-0" x 59'-2"

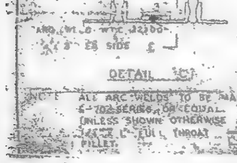


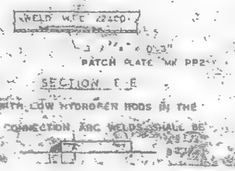


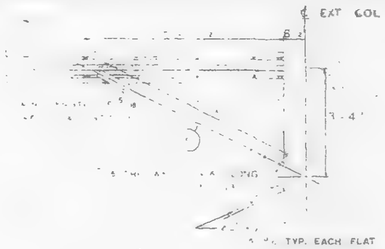


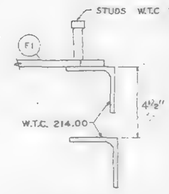












CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T1F	6	C32TIF - 59'-2"	ST201F
BRIDGING TRUSSES	T1	1	24T11 - 19'-11"	ST211
	T12	3	24T12 - 19'-11"	ST212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4"x 8'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 3/4"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1/2"x 3"x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 0'-9" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.135"x 19'-8 1/2"	ST303
	B	6	9" x 0.135" x 15'-2"	ST303
	C	3	9" x 0.135" x 13'-2 1/8"	ST303
	D	3	9" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1½"x¼"x 0'-6"	ST 400
¾" ø SHEAR ANCHOR	SA2	9	¾" ø STUD AS REQ'D	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x 6'-6"	ST 211
	DUS 2	1	3½"x3½"x⅜"x 3'-8"	ST 211
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-L 1½"x 1½"x	ST 212
			230 x 8'-6"	CD 204
CONNECTION PLATES	P1	5	3½" x ⅜" x 0'-8"	ST 400
	P2	4	4½" x .36" x 0'-9"	ST 400
	P3	1	4½" x .38" x 1'-0"	ST 400

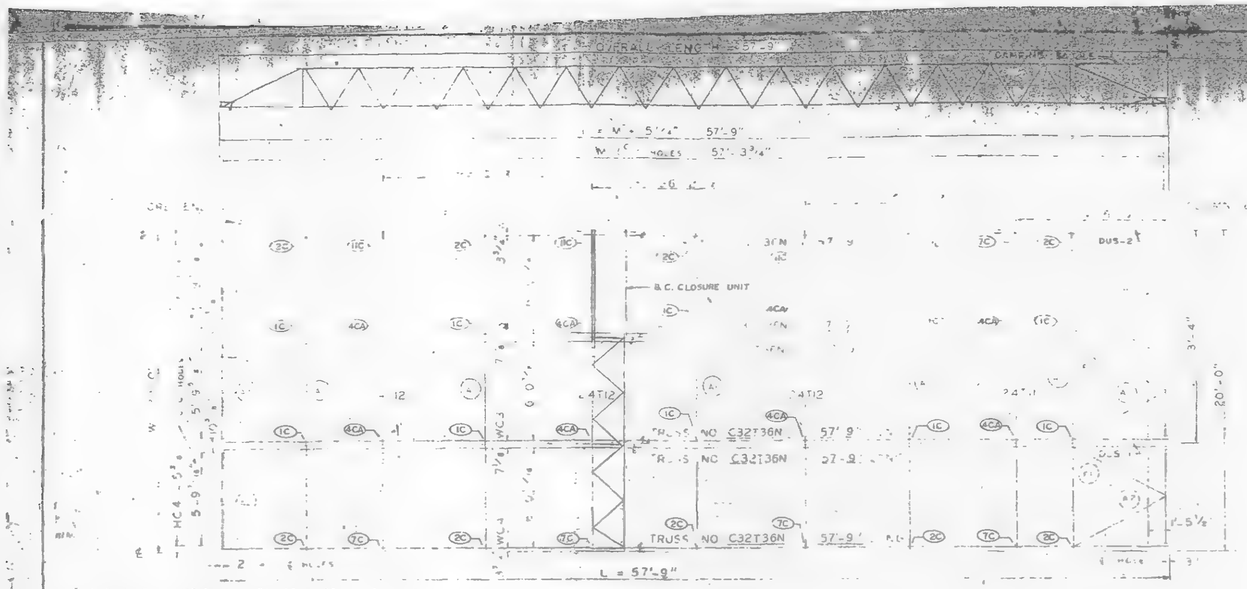
LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

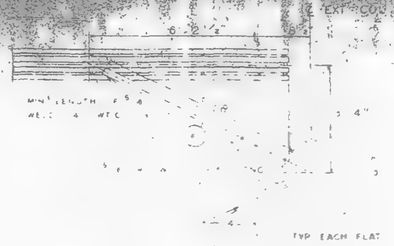
NO.	DATE	REVISION
1	8-9-69	AS NOTED

1 ST DRWG
3 AB4 3
AB4 15,16 & 39
7 AB4 4
SA 12A
7-AB3-2
7-AB1-2
7 AB4-42

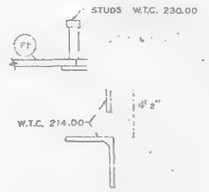
DETAIL PLANS
FOR
A. C. DALE FLINTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 47-48 (S) 47-48, 70-71 (N)
PANEL CRIF. 20'
BLDG. B FLOORS 47-48 (EAST & WEST) 70-71 (WEST)

FABRICATION BY	LACLEDE STEEL COMPANY
FABRICATED AT	MADISON, ILLINOIS
APPROVED FOR FABRICATION BY PORT AUTHORITY OF N.Y.& N.J.	DATE
APPROVED FOR FABRICATION BY	DATE
	SHOP DRAWING NO. SERIES
	SHEET NO. DRAWN BY
	DATE OCT. 23, 1968
	CHECKED BY
	DATE



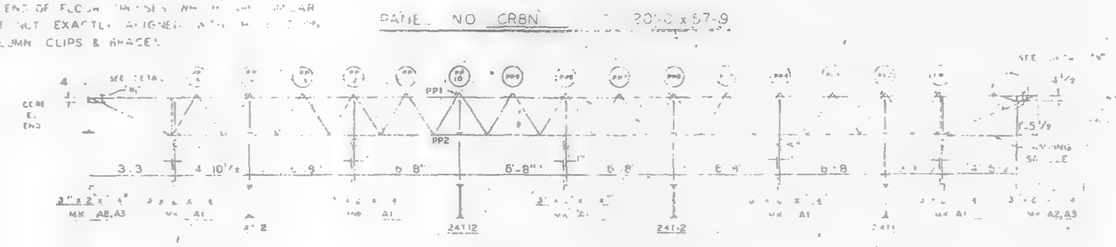


TYPICAL PLAN OF TOP CHORD & UMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 26300



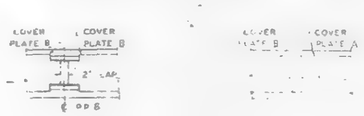
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES				
BRIDGING				BT211
	T2	3		BT212
3 x 3 x 1/4 ANGLE	A1	5	3"x3"x 6'-11"	ST 403
	A2	4	3"x3"x 6'-11"	ST 403
	A3	2	3"x3"x 6'-5"	ST 403
		5		ST 402
	PL	8	9	ST 400
MATCH		8		ST 400
		3		ST 303
OVER PLATE	C	3	3 x 0'-35"x13'-2 1/2"	ST 303
ANGLE CLIP		21	2 x 2 1/2 x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHORS	SA2	9	#6 REBAR x 0'-9"	ST 400
DAMPING SAFETY	SAFETY	2	3"x3"x 3/4"x3'-8 7/8"	ST 298
			2 1/2"x2"x 3/8 x3'-8 7/8"	ST 298
CONNECTION BAR	CBL	4	2" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	3"x4" D TUBE x6'-6 1/2"	BT212
				CD204
CONNECTION PLATES	P1	5	3'-2" x 3'-8" x 0'-6 1/8"	ST 400
	P2	4	4'-2" x .36" x 0'-9"	ST 400
	P3	1	4'-2" x .36" x 1'-0"	ST 400

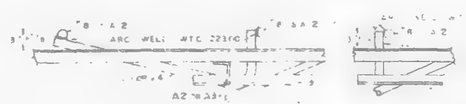


TOP VIEW DETAIL A

DETAIL A



DETAIL E



DETAIL A
AS APPLICABLE

DETAIL F

DETAIL F

SECTION A

NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE MAXIMUM SIZE FILLET.

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY
1	4-24-69	AS NOTED	GGC

7-AB4-10 12-20-68
10-15-68
2-22-68
7-22-68
6-6-69
6-6-69
6-5-69
2-22-68
10-12-68

CR8N 7'-9"

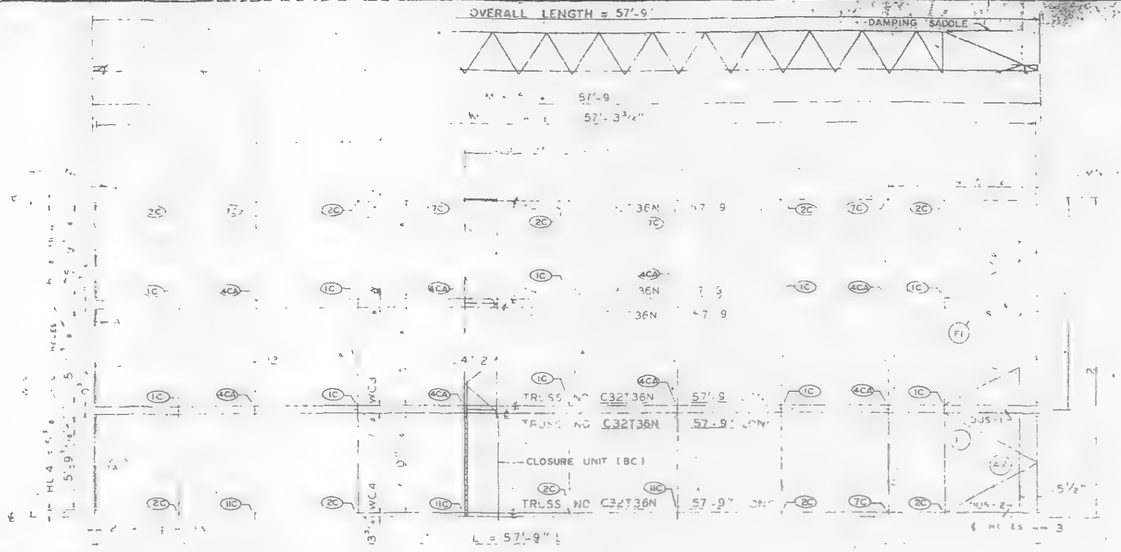
DRAWING NO 7-357 PLATE

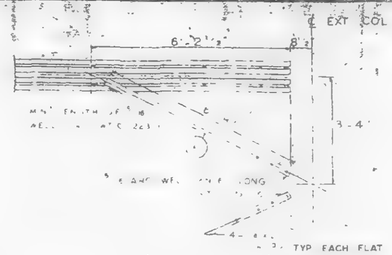
DRAWN BY [illegible] DATE MARCH 31, 1969

APPROVED BY T.M. CHIRA DATE MARCH 31, 1969

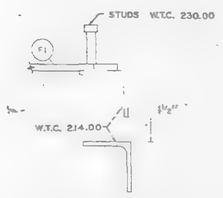
STATION CHART NO 221

SHEET NO FP CR8N





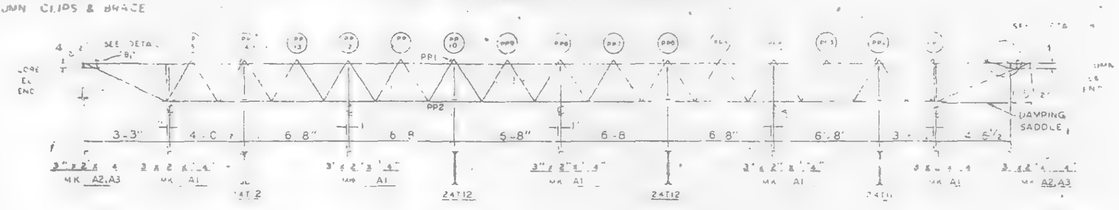
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES				
BRIDGING TRUSSES	T11	1	24T11 - 3'-9 - 11"	BT212
	T12	3	24T12 - 1'-9 - 11"	BT212
3 x 2 x 1/4 ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 15/16"	ST 403
	A3	2	3"x2"x1/4"x 5'-11 7/16"	ST 403
PLATES	F		1/2" x 5 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x1/4"x 0'-9"	ST 400
	PP2	18	4 3/8" x 0'-3"	ST 400
				ST 303
COVER PLATES	C	3	3" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	2	2" x 2"x 1/4" x 0'-6"	ST 400
7/8" SHEAR ANCHOR	SA2	5	7/8" REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUSH	2	3 x 3 1/2" x 3/8" x 3'-6 7/8"	ST 298
	DUSH-C	1	3" x 3 1/2" x 3/8" x 4'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT △	BC1	3	1'-0 TUBE x 6'-6 1/2"	BT212
				CD 204
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

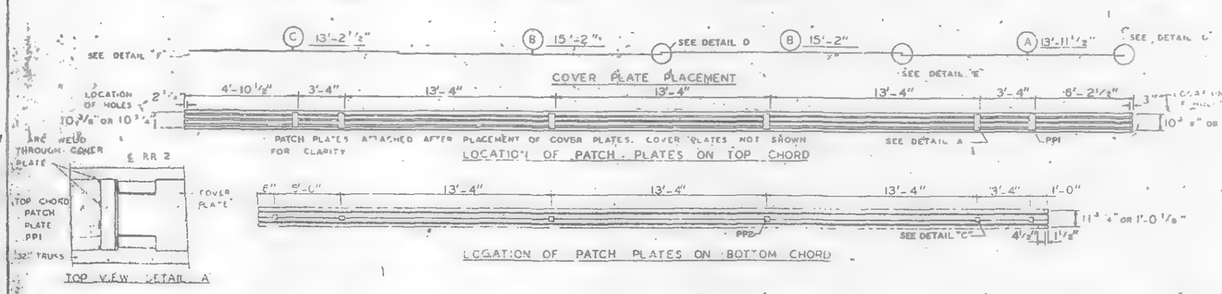


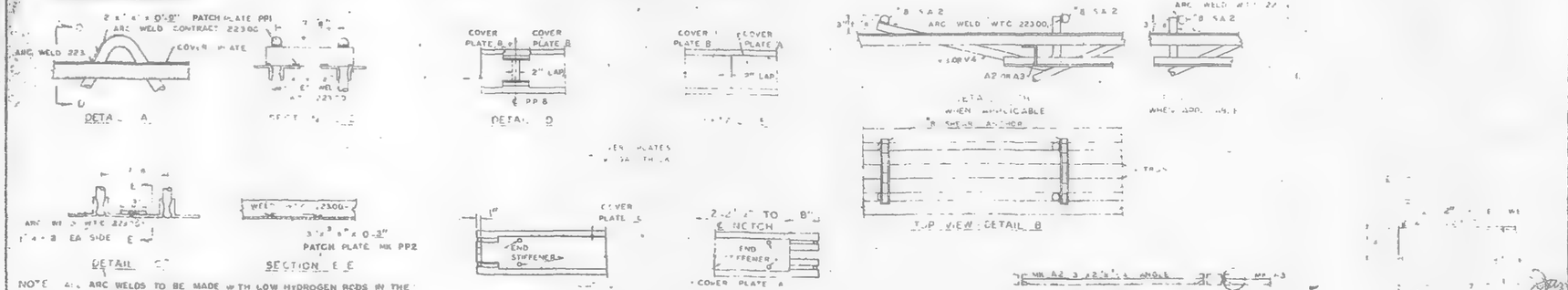
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

E & SHOWN IN NC4 ARE AT BEARING END OF FLOOR TRUSSE WHICH ARE NORMAL WITH BUT NOT EXACTLY ALIGNED WITH NOTE C ON THE COLUMN CLIPS & BRACE

PANEL NO 'C8N' SIZE 20'-0"x57'-9"







LETTERS AND NUMBERS IN ELLIPSES, ie.. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	4-24-72	AS NOTED	G.D.

REF

7-AB4-19	12-20-68
1c AB4 1"	10-15-68
" AB4 5 & 6	7-22-68
" AB4 41	7-22-68
SA 124	1-6-69
" AB3 56	1-6-69
" AB1 32	1-6-69
7-AB2 & 7	7-22-68
7 AB4-42	10-15-68

DETAIL C

MARK

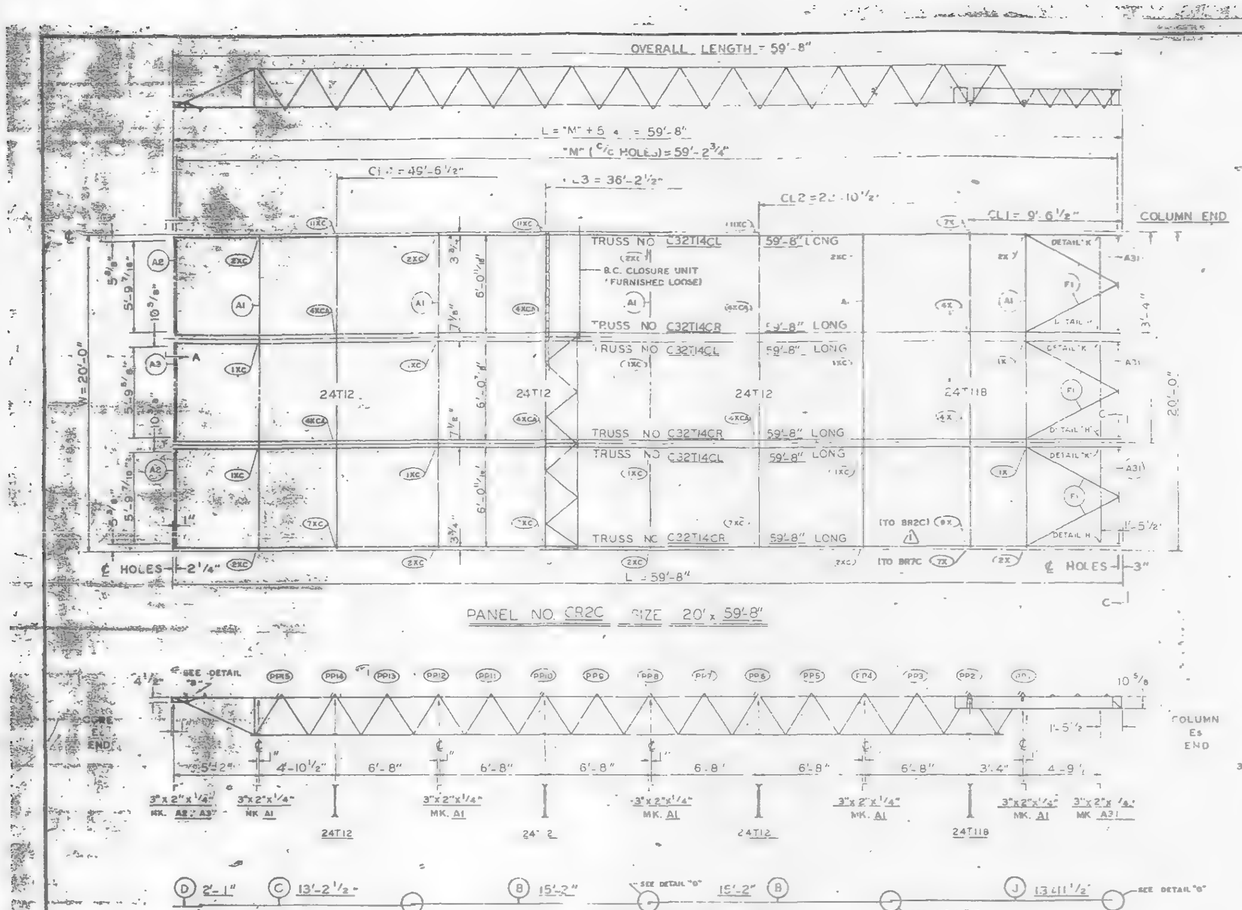
44 (SOUTH END)

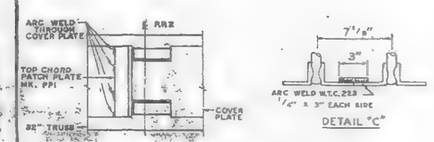
C8N 20'-0" x 57'-9"

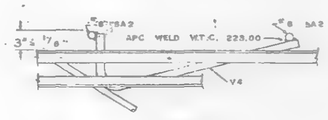
JMDAN

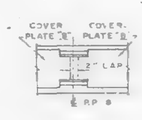
DESIGN DRAWING NO 393 56 PLATE 1

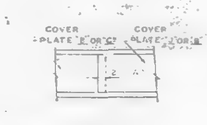
DRAWN BY	
DATE	MARCH 31, 1969
CHECKED BY	T.M.CHURA
DATE	MARCH 31, 1969
IN CHARGE OF	PROD DEV.
FABRICATION CONT. NO. WTC	221
SHEET NO	FP C8N

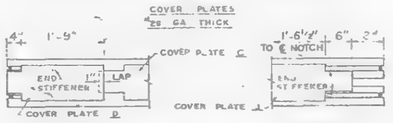


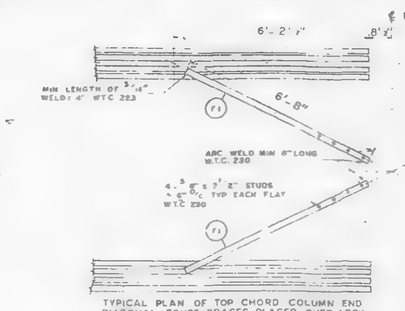


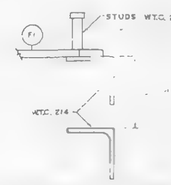






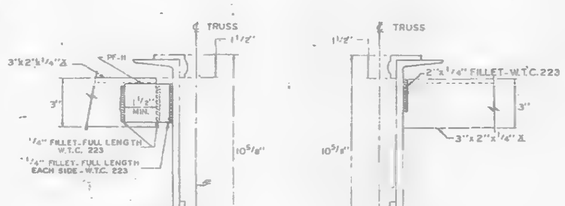


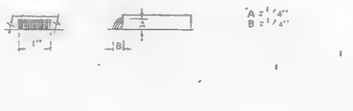




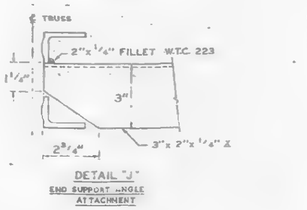
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T14CL	3	C32T14CL x 59'-8"	ST 214CL
	T14CR	3	C32T14CR x 59'-8"	ST 214CL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	4" □ 0'-6 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 4'x 19'-11"	ST 403
	A2	2	3"x 2"x 4'x5'-11 9/16"	ST 403
	A3	1	3"x 2"x 4'x5'-11 9/16"	ST 403
	A31	1	3"x 2"x 4'x5'-8"	ST 410
CLOSURE PLATES			1/4"x 4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS		6	4" x 5/8" x 5'-8"	ST 402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C	21	2"x 1"x 2"x 25"x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	6	"B REBAR x 0'-9"	ST 400
CONNECTION BAR	CB	5	1" D x 1'-3"	ST 400
CONNECTION PLATES	P	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4" 2" x .39" x 1'-0"	ST 400
	P9	6	3"x 1/8" x 4'-2"	ST 409

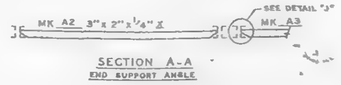
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (2X).
ALL CONNECTION DETAILS FOR FLOORS 25,59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.





NO.	DATE	REVISION
1	5-12-69	AS NOTED





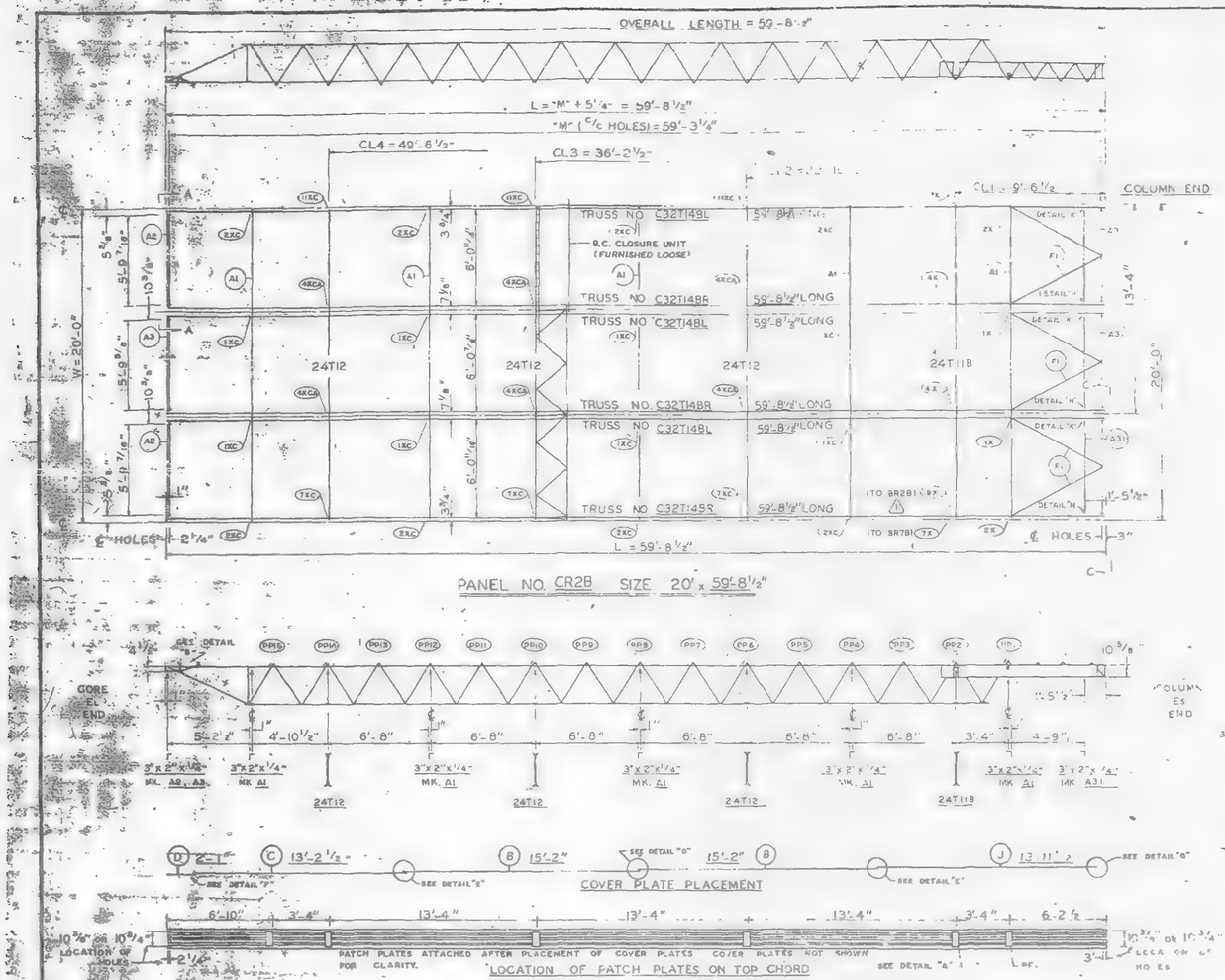
REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

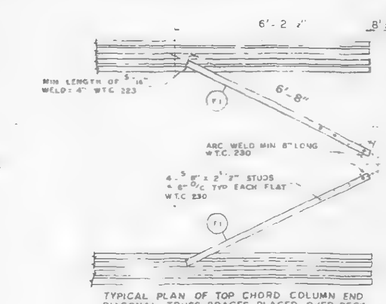
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)
PANEL CR2C - 20' x 59'-8"
BLDG. B FLOORS 59 & 92 (EAST)

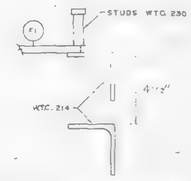
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR PONYA — DATE 6/6/69
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE
DETAILED BY LACLEDE STEEL CO.
DESIGN DRAWING NO 7-AB3-29 — PLATE
DRAWN BY [illegible] — DATE APRIL 28, 1969
CHECKED BY T.M. CHUBA — DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
FABRICATION CONT NO W.T.C. 221
SHEET NO FP CR2C



PANEL NO. CR2B SIZE 20' x 59'-8 1/2"



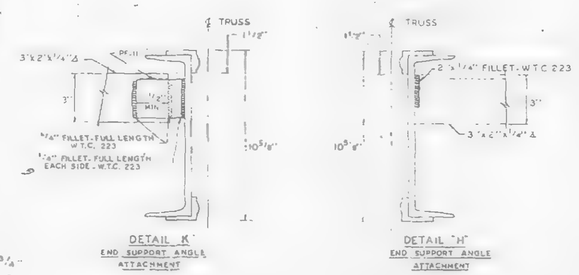
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	3	C32T14BL x 59'-8 1/2"	ST 2148L
	T14BR	3	C32T14BR x 59'-8 1/2"	ST 2148L
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 2118
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" □ 8'-8 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 3/16"	ST 403
	A31	3	3"x 2"x 1/4" x 8'-8 1/8"	ST 410
CLOSURE PLATES	PF11	3	3" x 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	6	11 1/2" x 3/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/16" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0.35" x 15'-2"	ST 303
	C	3	9"x .0135" x 13'-2 1/2"	ST 303
	D	3	9"x .0135" x 2'-1"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x 1 1/2"x .25"x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	6	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB	5	1" □ x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/8" x .39" x 0'-9"	ST 400
	P3	1	4 1/8" x .39" x 1'-0"	ST 400
	P9	5	3" x 1/2" x 1'-2"	ST 409

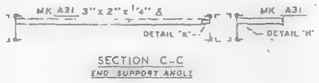
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (C2).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



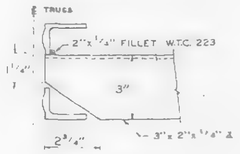
NO.	DATE	REVISION	BY
5	5-12-69	AS NOTED	GDC

REF DRWG.

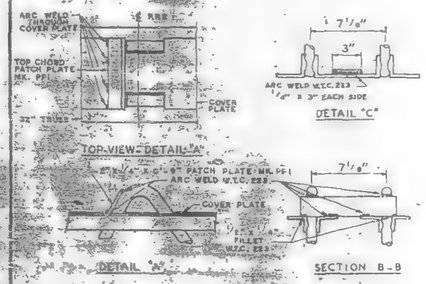
7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

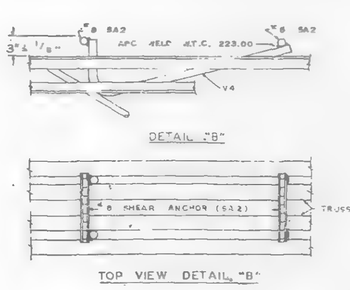


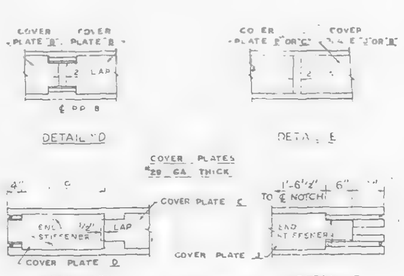
SECTION C-C
END SUPPORT ANGLE

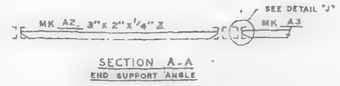


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT









SECTION A-A
END SUPPORT ANGLE

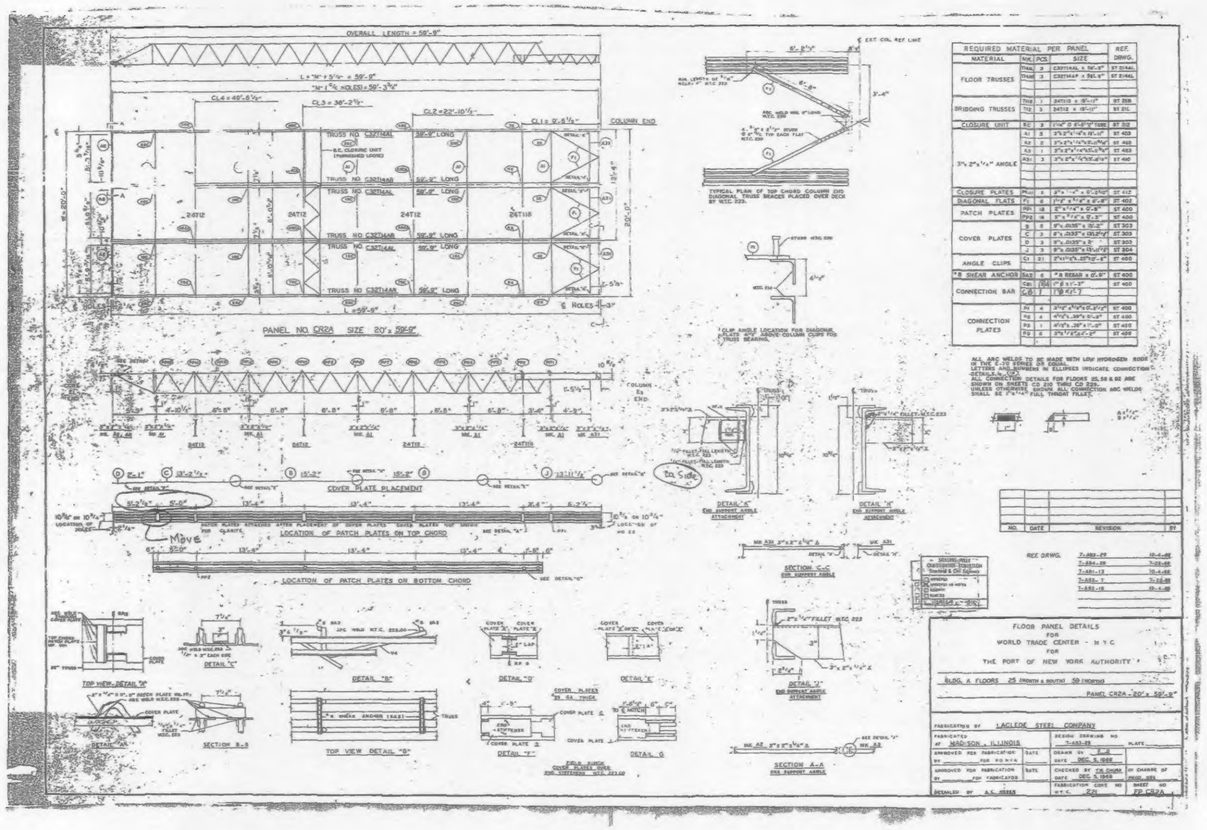
FLOOR PANEL DETAILS
FOR
NORTH SHADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

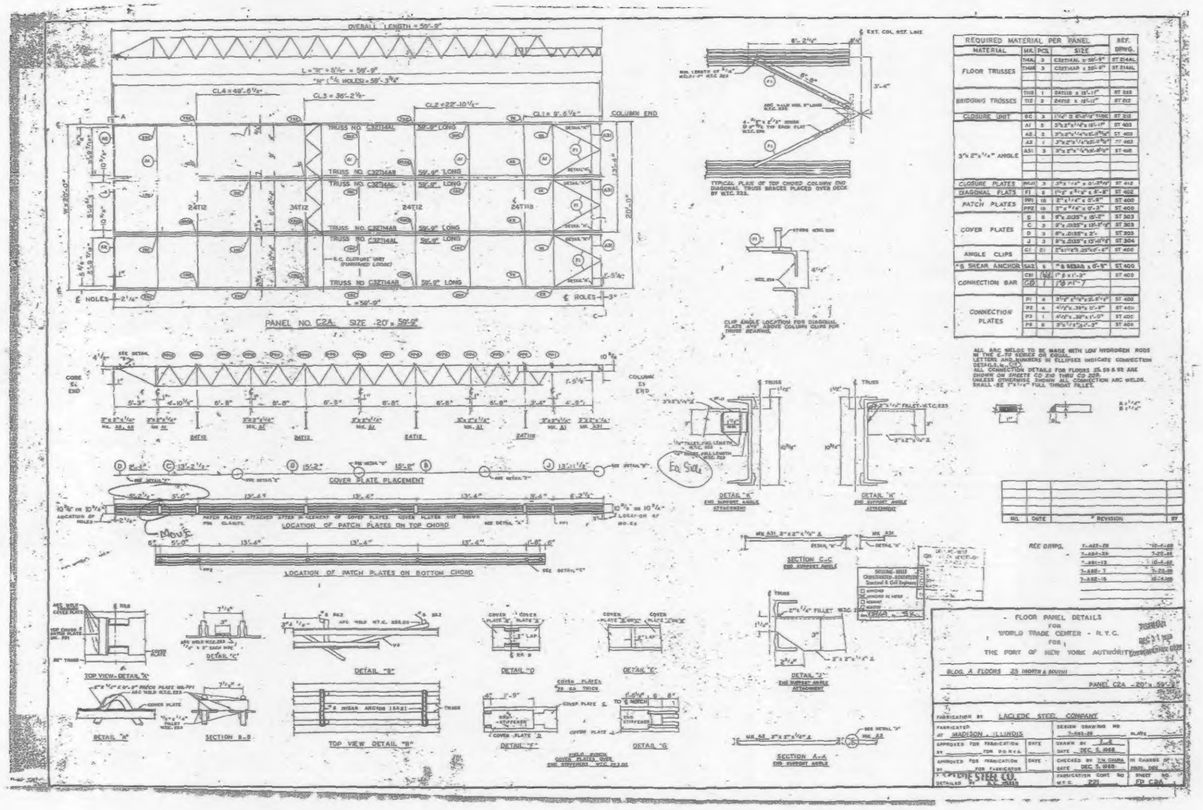
BLDG. A FLOORS 92 (NORTH)

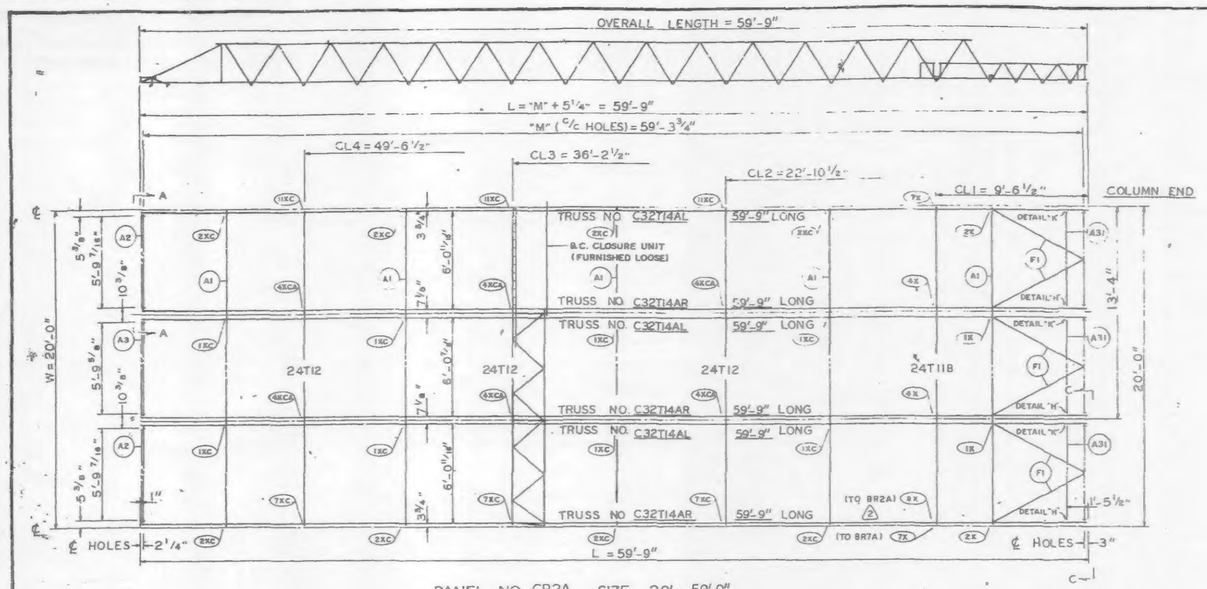
PANEL CR2B - 20' x 59'-8 1/2"

BLDG. B FLOORS 92 (WEST)

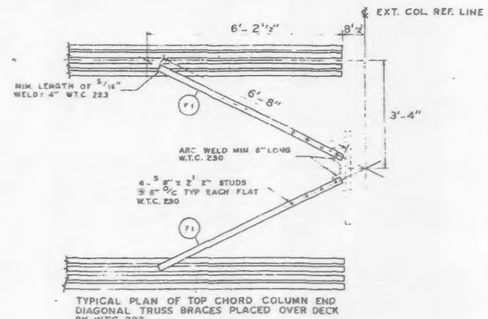
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO 7-AB3-29	PLATE
APPROVED FOR FABR. CATION FOR PONYA	DATE 6/6/69	DRAWN BY DWB DATE APRIL 28, 1969
APPROVED FOR FABR. CATION BY [illegible]	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221
		IN CHARGE OF PROD. DEV
		SHEET NO FP CR2B


OVERALL LENGTH = 59'-9"
PANEL NO. CR2A SIZE 20'x 59'-9"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD, COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY NYCD 225.
SECTION C-C
SECTION A-A
SECTION B-B
TOP VIEW DETAIL "B"
DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "J"
DETAIL "K"
DETAIL "L"
TOP VIEW-DETAIL "M"
DETAIL "M"
SECTION "N"
REQUIRED MATERIAL PER PANEL
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. 4 FLOORS 25 (NORTH & SOUTH) 50 (NORTH)
PANEL CR2A - 20'x 59'-9"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY FOR P.O.N.Y.&
APPROVED FOR FABRICATION BY FOR FABRICATOR
DETAILED BY A.S. DRAKE
DESIGN DRAWING NO. T-1431-28 PLATE
DRAWN BY DATE DEC. 5, 1968
CHECKED BY DATE DEC. 5, 1968
FABRICATION CODE NO. A.I.S.C. 224
SHEET NO. FP CR2A
REVISION
NO. DATE BY
SEE DRWG.
T-1384-29 10-4-68
T-1384-28 7-23-68
T-1431-13 10-4-68
T-1431-7 7-26-68
T-1431-15 10-4-68

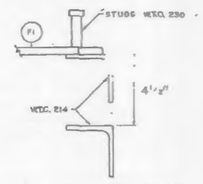

OVERALL LENGTH = 591'-8"
L = 71'-0 1/2" + 591'-8" + 71'-0 1/2" HOLDS = 591'-3 3/4"
CL4 = 48'-6 1/2"
CL3 = 385'-2 1/2"
CL2 = 28'-10 1/2"
CL1 = 9'-6 1/2"
COLUMN END
TRUSS NO. C32T14AL 591'-3" LONG
TRUSS NO. C32T14AR 591'-3" LONG
TRUSS NO. C32T14AL 591'-3" LONG
TRUSS NO. C32T14AR 591'-3" LONG
TRUSS NO. C32T14AL 591'-3" LONG
TRUSS NO. C32T14AR 591'-3" LONG
24T12
24T12
24T12
24T13
E.O. CLOSURE UNIT (FURNISHED LOOSE)
E HOLES
PANEL NO. C2A, SIZE 20'0 x 591'-8"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
PATCH PLATES ATTACHED AFTER ALIGNMENT OF SPLICE PLATES. COVER PLATES NOT SHOWN
ABOVE
CORE EL. END
COLUMN EL. END
TRUSS
DETAIL "A" END SUPPORT ANGLE ATTACHMENT
DETAIL "K" END SUPPORT ANGLE ATTACHMENT
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "H"
DETAIL "J"
TOP VIEW-DETAIL "B"
TOP VIEW DETAIL "B"
SECTION B-B
SECTION C-C END SUPPORT ANGLE
SECTION A-A END SUPPORT ANGLE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY MISC. ENG.
CLIP ANGLE LOCATION FOR DIAGONAL BRACES AT TOP CHORD COLUMN CLIPS FOR CHORD BEARING
E EXT. COL. REF. LINE
REQUIRED MATERIAL PER PANEL
MATERIAL | MK. | PCS. | SIZE | REF. DWGS.
FLOOR TRUSSES | T14AL | 3 | C32T14AL x 591'-3" | ST 214AL
T14AR | 3 | C32T14AR x 591'-3" | ST 214AL
BRIDGING TRUSSES | T13S | 1 | 24T13S x 19'-1 1/2" | ST 213
T12 | 3 | 24T12 x 19'-1 1/2" | ST 212
CLOSURE UNIT | EC | 3 | 1/16" D 45x45x6" TUBE | ST 213
3"x 2 1/2"x 1/4" ANGLE | A1 | 5 | 3"x 2 1/2"x 1/4"x 15'-1" | ST 403
A2 | 3 | 3"x 2 1/2"x 1/4"x 6'-0 1/2" | ST 403
A3 | 1 | 3"x 2 1/2"x 1/4"x 5'-0 1/2" | ST 403
A31 | 3 | 3"x 2 1/2"x 1/4"x 6'-0 1/2" | ST 403
CLOSURE PLATES | PC1 | 3 | 1/2"x 1'-0" x 2'-0 1/2" | ST 402
DIAGONAL PLATE | P1 | 2 | 1/2"x 8"x 2'-6 1/2" | ST 402
PATCH PLATES | PP1 | 18 | 5/8"x 1'-0" x 6'-8" | ST 600
PP2 | 18 | 3/4"x 1'-0" x 6'-3" | ST 600
COVER PLATES | B | 6 | 1"x .0375"x 19'-3" | ST 303
C | 3 | 1"x .0375"x 19'-3" | ST 303
D | 3 | 1"x .0375"x 3'-1" | ST 303
J | 3 | 1"x .0375"x 13'-0" | ST 304
ANGLE CLIPS | CT | 21 | 2"x 1"x 5" x .0574"-1" | ST 402
3/4 SHEAR ANCHOR | SA3 | 5 | 3/4 STUD x 5'-0" | ST 400
CONNECTION BAR | CB1 | NS | 1"x 1'-3" | ST 403
CB | 1 | 1"x 2'-1" |
CONNECTION PLATES | P1 | 4 | 3/4"x 1'-0"x 2'-0 1/2" | ST 400
P2 | 4 | 1/2"x 1'-3 1/2"x 2'-0" | ST 401
P3 | 1 | 1/2"x 1'-3 1/2"x 1'-1" | ST 402
P4 | 6 | 3/4"x 1'-0"x 2'-3" | ST 400
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS E70XX-H4 OR EQUIVALENT.
LETTERS AND SYMBOLS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN.
SEE SHOP DRAWINGS DETAILS FOR FLOORS 25,59 & 92 AND ERECTION DRAWINGS SHEETS C2 AND T1M2 C2 2ND.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 5/16" FILLET THROUGH FILLET.
NO. | DATE | REVISION | BY
REF DWGS.
T-685-28 10-6-66
T-685-26 7-20-66
T-685-13 10-6-66
T-685-7 5-24-66
T-685-15 10-24-66
- FLOOR PANEL DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 25 (NORTH & SOUTH)
PANEL C2A - 20'-0 x 591'-8"
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT JACKSON - ILLINOIS
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR
DETAILED BY K.L. MILLS
DESIGN DRAWING NO T-685-28
DRAWN BY JWE DATE DEC. 5, 1966
CHECKED BY T.N. SHAPIRO DATE DEC. 5, 1966
FABRICATION CONT. NO. W.T.C. 25
SHEET NO. FD C2A
Laclede Steel Co.



PANEL NO. CR2A SIZE 20' x 59'-9"



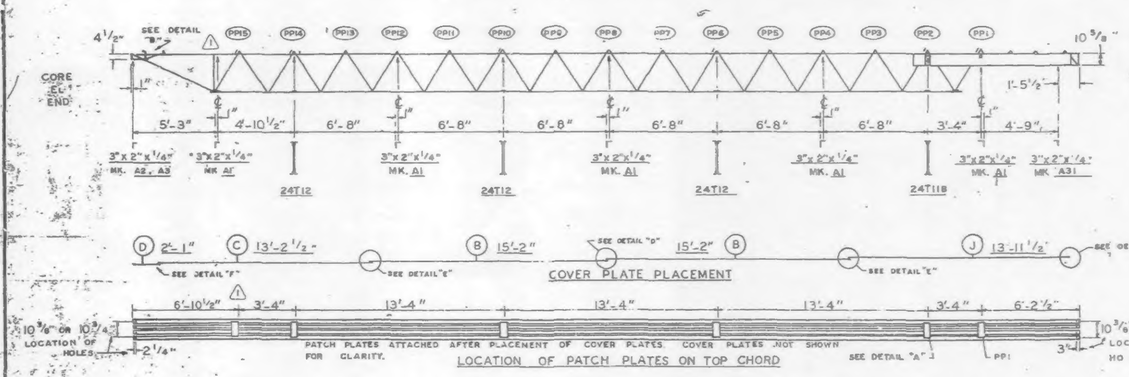
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

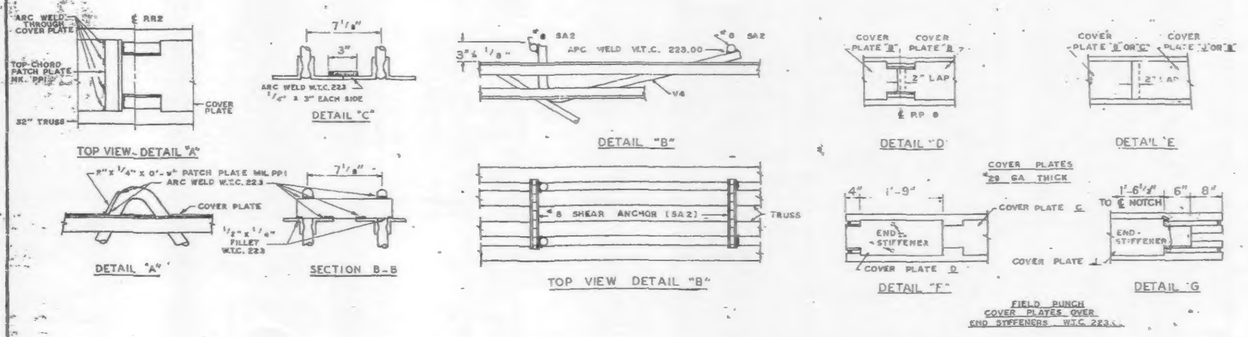


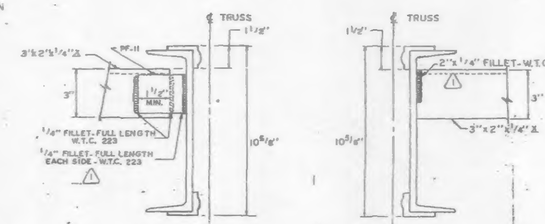
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

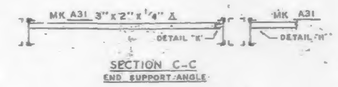
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	11 1/4" □ 6'-6 1/2" TUBE	BT 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 7/16"	ST 403
	A3	1	3"x 2'-x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1'-2" x 5 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x 5/16" x .25" x 0'-6"	ST 400
ø 8 SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 5/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1K).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

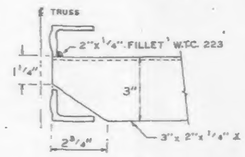




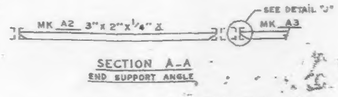




SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY
2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

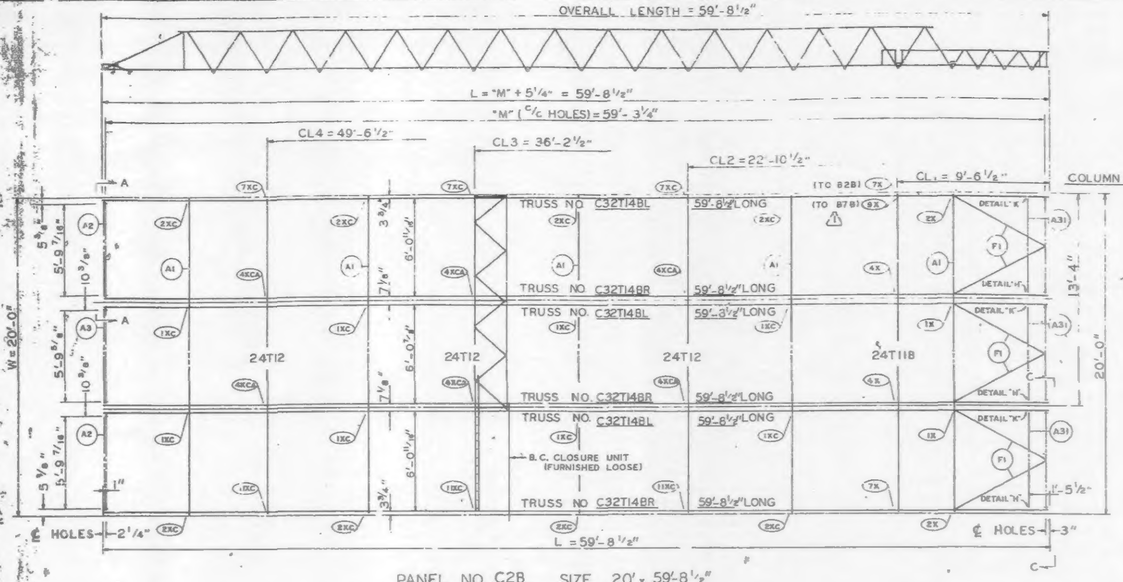
REF DRWG.

7-AB3-29	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2- 7	7-22-68
7-AB2-15	10-4-68

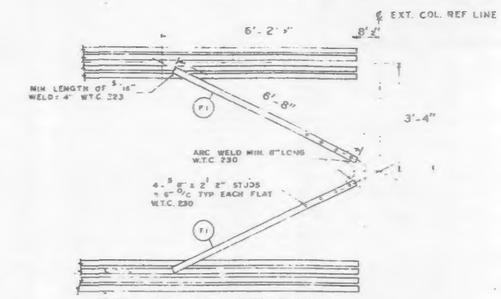
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL CR2A - 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

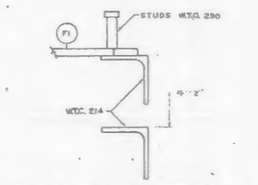
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-29 PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE 6/6/69
DRAWN BY [illegible] DATE DEC. 5, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY T.M. CHURA DATE DEC. 5, 1968 IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]
FABRICATION CONT NO W.T.C. 221
SHEET - NO FP CR2A



PANEL NO. C2B SIZE 20' x 59'-8 1/2"



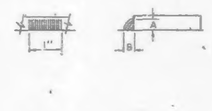
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

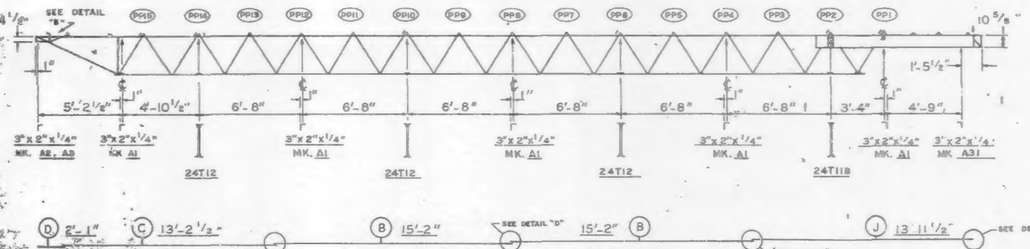


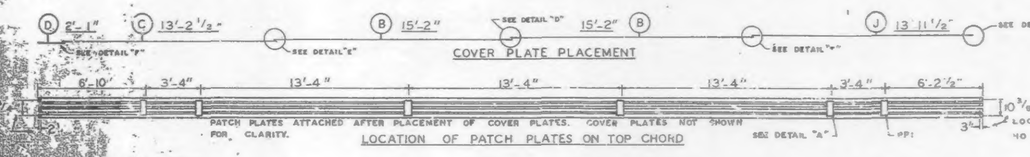
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	3	C32T14BL x 59'-8 1/2"	ST 214BL
	T14BR	3	C32T14BR x 59'-8 1/2"	ST 214BL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	BT 211B
	T12	3	24T12 x 19'-11"	BT 212
CLOSURE UNIT	BC	3	1 1/4" ▯ 6'-8 1/2" TUBE	BT 212
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1'-4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1'-4" x 5'-11 3/4"	ST 403
	A3	1	3" x 2" x 1'-4" x 5'-11 3/4"	ST 403
	A31	3	3" x 2" x 1'-4" x 5'-8 1/2"	ST 410
CLOSURE PLATES	PP-11	3	3" x 1'-4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	11'-2" x 3 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3 1/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/8"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 12'-11 1/8"	ST 304
ANGLE CLIPS	C1	21	2" x 1 1/2" x .25" x 0'-6"	ST 400
*8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 1" FULL THROAT FILLET.

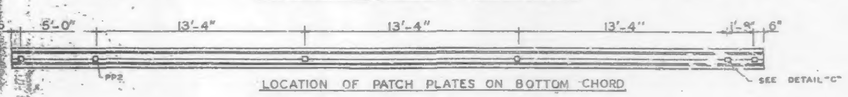




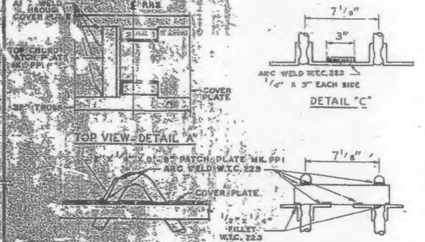


COVER PLATE PLACEMENT

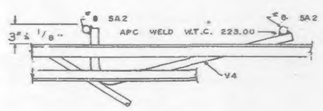
LOCATION OF PATCH PLATES ON TOP CHORD



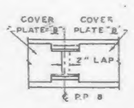
LOCATION OF PATCH PLATES ON BOTTOM CHORD



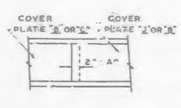
DETAIL "C"



DETAIL "B"

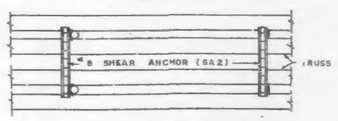


DETAIL "D"



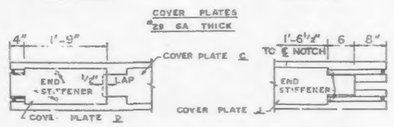
DETAIL "E"

SECTION B-B



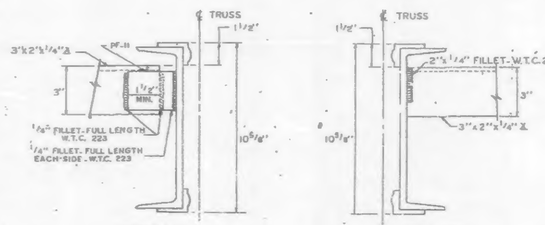
TOP VIEW DETAIL "B"

COVER PLATES 29 GA THICK



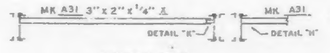
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

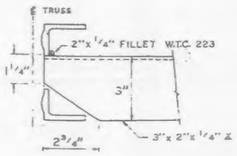


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

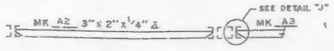
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY
1	5-12-69	AS NOTED	G.D.K.

REF DRWG.

7-AB3-28	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB2-7	7-22-68
7-AB2-15	10-4-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

PANEL C2B - 20' x 59'-8 1/2"

BLDG. B FLOORS 92 (WEST)

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7-AB3-28 PLATE
APPROVED FOR FABRICATION BY	DATE 4/4/69	DRAWN BY	DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY	DATE	CHECKED BY	T.M. CHURA DATE APRIL 28, 1969
DETAILED BY		FABRICATION CONT. NO W.T.C.	221
		IN CHARGE OF PROD. DEV.	
		SHEET NO.	FP C2B